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# THE macdonald Journal

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## Journal Jottings

I must admit that I approach the writing of this column with extremely mixed emotions. The fact that we were unable to put out a Journal in the month of December because of — what was the polite way of expressing it — the temporary disruption in the mail services, was the first time that I can remember not being able to go to press. This break in continuity is one I sincerely hope will never be repeated. On the brighter side, working on a bigger, two-in-one issue has been an interesting experience. A glance at "In This Issue" above will show that there is some good reading in the pages ahead. "A Man and His Visions" reminds us of the bond that exists between Macdonald and the community. Mr. Roy Blair, who died in 1973, left his farm to the College. Professor Jones tells us about this most interesting man and about Macdonald's plans for his bequest.

There were several approaches that could have been taken to

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present the information contained in "A New Approach to Agriculture." It could have been presented as a press release or written by one of the professors mentioned in the article. The one settled on was that I would be allowed to sit in on several meetings. This I did during the past summer. Although I have never attended any, I would compare these meetings to "think tank" sessions where an idea or suggestion is mulled over, analysed, discussed, and finally accepted or rejected. Then on to the next point. As an observer, I found these meetings fascinating; I only hope that the article does them justice. I urge all our readers to read "A New Approach to Agriculture". It is an important step that Macdonald is taking and I know we'd like to hear your comments on it.

So often in the past few years for various reasons there have been articles that have never got written, short items that didn't find space, or leads that weren't followed up. "Macdonald Reports" was not appearing as often as it

## In This Issue

Cover: The late Roy Blair admiring sugar maples he had planted in 1945. See Article page 3.

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should. Thanks to Joan Habel, whose articles and editorials have appeared in past issues, this has been rectified. We asked Joan if she would like to compile and write up "Macdonald Reports" for at least four issues a year. The answer was an enthusiastic yes as can be seen in this issue.

The death in early November of the President of the Quebec Women's Institutes, Mrs. Edyth Westover, has left all who knew her with a feeling of sorrow, and each will remember her for some special reason in their own way. Mrs. Westover's strong sense of duty and her dedication to the Women's Institutes and to the community have left their mark and will not be forgotten. I feel privileged for having known her and will long cherish her warm and friendly letters and the memory of the delightful conversations we had over the telephone or whenever she visited Macdonald.

Hazel M. Clarke



One often hears the argument from urban people and businessmen that agriculture is unjustifiably favoured over other industries. Their argument is built around the idea that taxpayers are forced to contribute to the support of a system of research stations, extension services, and agricultural colleges that seems to benefit only one very small segment of the agricultural industry — namely, the farmer. They go on to add that, in addition, these very same farmers are having their market prices and income artificially supported through a whole system of taxpayer-financed government price programs and production incentives.

Why, they ask, doesn't the small businessman receive the same sort of favourable treatment from government. After all, the small businessman is faced with many of the same problems as the farmer. Well, perhaps they have a point as far as setting up a similar structure for small business. But they seem to be off-target in suggesting a reduction of

research and education efforts in agriculture. To reduce expenditures to agricultural research and education could adversely affect the world's ability to feed itself.

For example, a British biological scientist recently stated that insects, animal pests, diseases, and weeds destroy no less than half of all the food produced in the world today. In tropical countries, these food losses are estimated to be at least two-thirds.

Looking at the issue from this perspective, an argument can certainly be made that not nearly enough assistance is being given to agricultural research and education. Considering that currently there are 1.5 billion people thought to be inadequately fed, it is frightening to imagine what condition the world would be in if we had not had the benefit from millions of dollars of agricultural research over the past few decades.

It is even more frightening to imagine what level of living the world would face in the years ahead if this agricultural research and education efforts were cut back from present levels. Some population experts predict that the world's population will double in the next 25 years. While there is a substantial amount of sub-marginal farmland that could be pressed into production, it is not likely great enough to offset this type of population increase. This means that a substantial portion of our future food supply must come from existing acreage. And this in turn is going to mean an increased need for agricultural research and education in order to meet the world's food requirements from this limited land base. This will be a great challenge to the agricultural industry. It can be met, but only if agriculture receives additional support to increase the production, marketing, and distribution of food.

Gordon Bachman



# A Man and His Visions

by Professor A.R.C. Jones,  
Woodland Resources,  
Department of Renewable  
Resources

It was a cool, grey fall day in 1959 that I first met Roy Blair as I drove into his Rockburn farmstead in answer to a request to inspect his sugarbush. This woodlot was of impressive dimensions, nearly 35 acres of old growth sugar maple containing some trees nearly three feet in diameter, 90 to 100 feet in height, many of them at least 50 years older than their aged, but very active, owner. He was immensely proud of them and of his five acres of sugar maple plantation established in 1945 with seedlings dug from his sugarbush and planted in furrows at five-foot intervals. He had decided that planting sugar maple to restore some cut over land to production was a good conservation measure even though he might never benefit from the project. Some large-crowned butternut trees in another woodlot were also a tribute to his interest in reforestation. He was most enthusiastic about maple syrup production and prior to renting his sugarbush in his final years he had produced a fine quality light amber syrup well known in the neighbourhood.

His superb stand of sugar maple was attracting widespread interest from the district's timber buyers. He said with a wry smile, "They come in, offer me a price and, when I say no, they ask how old I am; I'm not going to have my bush slash cut while I have anything to say about it."

At the time of this first visit I stressed the need to do some harvesting in his woods as the younger trees were suffering from severe suppression from the old growth, large-crowned, defective trees. A few years after this, he made a partial cut for beech and other non-maple species which helped to release some of the intermediate sugar maple. It was then that the idea of how to preserve this heritage for future generations began to take shape in his mind. Roy had several things that interested him to the point of distraction—better woodlot practices, a provincial extension forester in Huntingdon, maple syrup production, Jersey milk and Jersey cows, more or less in that order, I believe.

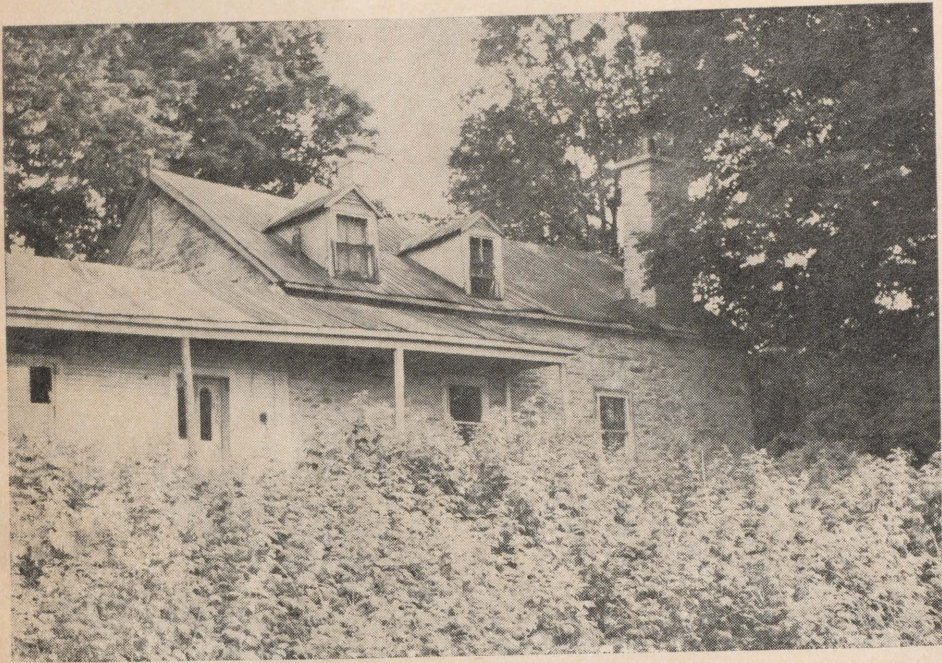
He also spoke of the early beginnings of the farm. It was purchased by Roy's grandfather the year of Confederation—1867! At that time the sugarbush across the road had been clear cut for potash for soap manufacture and sale. The stone house, built in 1848, was used as the farmhouse. Because of the devastation of the sugarbush his grandfather planted maples around the farmhouse as he was determined to have some trees in the neighbourhood. They stand to this day in front of Blair House, fitting and impressive monuments to the patience, optimism, and pioneering spirit of the region.

Roy Blair grew up and farmed the Rockburn area and was looked on by many of the traditional, custom-hardened residents as an eccentric. There is no doubt that he was non-conformist and innovative and wanted to try out new

ideas which were often unconventional but have since come into accepted use. He was one of the first in the county to try haylage; he experimented with soybeans decades before their current popularity. He built a wooden silo in the thirties out of Douglas fir planks and elm ribs that still stands and puts many modern silos to shame. His gigantic barn has stood the test of winds which as recently as the summer of 1973 twisted and tore mature trees out of the ground like matchsticks. Roy graduated from McGill University with a B.A. in 1914 and attended graduate school in 1915 and 1916. His thesis reported on the role of wood-destroying fungi in roof-deck construction. The **American Lumberman** of March 13, 1920 carried an article by R. J. Blair entitled, "Lumber Trade Loses Good Customers—Who Is to Blame?". The author, described as Pathologist, Forest Products Laboratories of Canada, McGill University, calls for the lumber industry to advise their clients on the proper use, treatment, and installation of timber in construction otherwise wood will be replaced by competing materials such as concrete and steel.

My sincere hope is that he took his own advice to heart in repairing the farmhouse and barn and in constructing outbuildings over the years. He was far ahead on his time in this concern for proper use of lumber as costs since that time have risen so sharply as to price wood products out of many of the traditional housing and construction industry markets.







Opposite page: Two views of the old farmhouse before repair work.  
 Right: The barn and silo in the summer of 1975.



From time to time there were other meetings with Roy Blair, and he became a keen cooperator in 1967 in an A.R.D.A.-financed study of 60 owners in a woodland cooperators program in the Chateauguy Valley. His enthusiasm went to the extreme of buying 285 arpents of additional land north of the home farm to create a more viable unit for a most generous bequest.

A lasting memory is that of sitting in his sparsely furnished living room in mid-winter as he nursed two gigantic elm logs into flame in the blackened fireplace. The logs stretched halfway across the room and he was using the unburnt portion of one as a foot-rest—a true Indian fire with a pioneer's lack of concern for the creature comforts. It must have been less than 35° Fahrenheit in that room; needless to say, my visit was not a prolonged one.

### The Will and Reality

Roy Blair died in April of 1973 and his will, in part, read as follows:

I give and bequeath all my property ... to Macdonald College ... in the expectation that my farms will be used for the benefit of the agriculture industry of my part of the Province of Quebec, and ... that my woodlot would be preserved from clear cutting, and maintained as a sugarbush and woodlot ... The property is bequeathed to Macdonald College, to be used for a period of at least ten years for purposes of agricultural and silvicultural development. Some study of practical dem-

onstrations with marginal farms is badly needed in southwestern Quebec. My beneficiary is ... directed to explore ... under practical, realistic, one-family farm conditions, the possibilities of profitable agriculture based on agricultural and woodlot products ... If the above objective is not practical I expressly wish ... Macdonald College to investigate the possibility of using my farm as the nucleus of a practical farm school for the training of young people ... If continuations of any such project is decided to be impractical ..., the College will at that time have the authority to use the property for other purposes, or ... dispose of the property as it sees fit, the proceeds to be used for research aimed at the problems of marginal farms in southwestern Quebec.

It was not until late March of 1975 that the estate was wound up, assets consolidated, the will probated, and the deeds transferred to Macdonald College of McGill University. A further item in the will stated that if the College were "unable to accept the bequest of my farms then the Chateauguy Valley Historical Society was to receive

the immovable properties" and be allowed to use the house and barn for their purposes. The Society had been using the buildings as a repository for some of their agricultural and other historical items just prior to Roy Blair's death. The Society has decided that operating Blair Farm as a museum would be a difficult and expensive undertaking in view of their other development schemes and the plans of the College to develop the farm along the lines proposed in the will. They graciously withdrew their claim on the house provided certain stipulations were met with regard to the future management of the property.

It was also during this period that a hooligan element in the district took its toll of many of the valued possessions of the estate. The carnage began the night Roy Blair died when thieves and vandals descended on the property. From that time on, the house and barns have been subjected to a continuous siege of pilferage and destruction. Nothing was sacred despite valiant efforts of the executor to defend it from these parasites. All kinds of equipment and furniture was stolen, broken, or cannibalized; bathroom fixtures were ripped off;



books and documents were rifled and scattered throughout the house in an indescribable mess; stones in the walls and fireplace were loosened and broken, and the front door was stolen from its hinges. This has meant a massive clean up to put the house into livable condition again. Contractor, Maurice Perreault of Huntingdon, is working on this job and Dick Keeler has taken on the job of Superintendent and moved in with his wife, Monique, and new daughter on Thanksgiving weekend.

### The Future—An Optimistic View

One must not judge the potential of the Blair property on the current disrepair of the barns and outbuildings and the neglected condition of the woods and fields. Much better to judge the future prospects of the property for production, for education and research, and for recreation for visitors and residents of the region. The skills for innovative natural resources management are visible throughout the district. In the neighbourhood, there are excellent models of how hard work and wise management have been combined to produce profitable harvests despite the vagaries of the weather, the constraints of the landscape, and widespread exhaustion of the fertility of many of the soil types.

It is now time to put the Blair Farm to work again. Many worthwhile proposals have been made. Besides the great value of the estate as a training ground for practical field exercises there are

schemes such as organic farming, a form of land-rescue agriculture that has become of great interest to environmental specialists. Many experts and practitioners in traditional agriculture have become dissatisfied with extravagant use of power for a minimum output of food, forage, and fibre and the long-term effects of cropping the land without returning the vital organic matter as well as excessive reliance on increasingly costly chemical fertilizers. The study of recent developments in solar and wind energy as well as other energy conservation measures are in the works with the cooperation and expertise of the Brace Research Institute at Macdonald College. The possibility for projects in the behavioural sciences and the concept of profitable farm recreation enterprises all have virtue using Blair Farm as a base. The early history of the house and buildings and its unique location have considerable historical interest for residents and visitors to the region.

A fertility project to study soil productivity for soybean, rapeseed, wheat, barley, and corn under various fertilizer applications is in its second year of field trials. The house is being repaired with every effort being made to keep the early character of the building unchanged. The clean-up of wind-felled and wind-risk trees is currently taking place, and the marking of boundaries, the repair and renewal of line fences, and the clean-up of a century of discarded equipment and other debris are all projects actively underway.

In addition to improving the aesthetic and scenic values of the landscape the forestry plans include salvaging trees felled by the '73 hurricane, increasing the productivity of the mature forests through cutting of the overaged and decadent trees and the re-establishment of a new forest by planting and seeding roughly 10 acres of existing scrubland and cut-over woodland. A firewood operation now taking care of the wind-felled timber and trees killed by Dutch Elm disease has a goal of 100 cords per annum.

As I walked through that fine, old sugarbush, passed the caved-in sugar shanty, to check on the firewood operations I was struck once more by the grandeur of those mighty trees and the generosity of Roy Blair's gift. This magnificent stand of hard maple had stood for well over a century against the ravages of time, of wind and weather, and of the temptations of the market place. Undoubtedly this was the finest stand of hard maple in the Chateauguay Valley, for that matter, in the Province of Quebec. As I admired those old veterans, I had the distinct impression that someone was pointing over my shoulder; "What should be done with that tree over there with the broken top?", a familiar high-pitched voice seemed to ask. No, it must have been my imagination but I couldn't be that sure. It is to be hoped that the comforting presence of Roy J. Blair and the spirits of his forefathers will rest peacefully with this fine bequest for the years to come.



# An Alternative Approach to Agriculture

by Hazel M. Clarke

What is hypothesis and what is truth? What is proven; what is assumed? Most people are confused by the many conflicting statements on agriculture, food, and health that confront them. Who knows for certain the answers to some of these random questions? Is there really an energy crisis? Is solar power an answer? What can be done about urban sprawl, about marginal land? Are our foods too highly processed? Are there too many additives in the food we eat? Why does it take so many calories to produce one calorie of food? Are we using too many antibiotics in animal production? Do they have an effect on human health? Are organic foods superior in taste and nutrition? What can be done with animal waste, particularly in intensive feedlot operations? Is there an alternative approach to agriculture?

On November 21, 1975, the Faculty of Agriculture approved the establishment at Macdonald College of a Centre . . . (name not as yet announced). The Centre will attempt to remove some of the question marks in statements concerning soil, food, and health. This approval terminated nearly a year of preparatory work and began what could be one of the most exciting and rewarding chapters in the College's already distinguished history, putting it in the forefront of other North American agricultural colleges and universities.

"We are the first in Canada to establish such a Centre," said Dean A. C. Blackwood, "and I feel it will offer the faculty a real chal-

lenge to work together on long-term integrated areas that are causing concern in agriculture today. There are so many areas that require a fresh look or a new approach that one of the real problems we face will be to decide which ones to attack first."



Dr. A. C. Blackwood

Although the Centre has not as yet been set-up, it will be concerned with integrated/preventive approaches to problems in such areas as:

low-energy food production; minimal, prudent use of chemicals; recycling, e.g. of food and farm wastes; soil-food-health relationships; food processing and health; distribution systems; nutrition education for the consumer.

These areas were suggested by a Steering Committee set up by Dean Blackwood to study the feasibility of a new approach to agriculture. Members of the committee were Professor Stuart B. Hill, Major Professor of Zoology in the Department of Entomology, Professor A. F. Mackenzie, Chairman of the Department of Renewable Resources, Professor Helen R. Neilson, former Director of the School of Food Science at present on sabbatical leave, and Professor Sherman P. Touchburn, Chairman of the Department of Animal Science.

This article is based on the Steering Committee's thoughts, ideas, and recommendations. This short paragraph, from one of their preliminary reports states the problems, as they see them, succinctly and briefly.

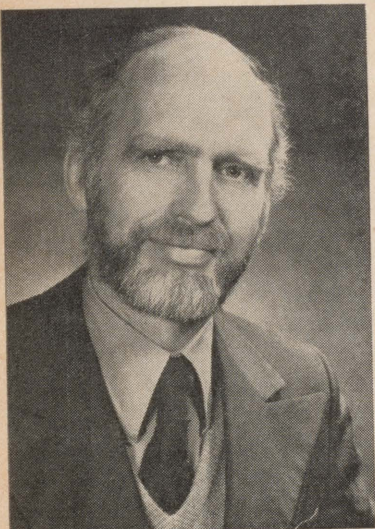
"In recent years concern has been developing about present agricultural systems that depend heavily on chemical fertilizers and pesticides, and fossil fuel inputs. At the same time the relevance of many aspects of food technology and the extent of food processing has been questioned in relation to food quality and therefore human nutrition."

Many at Macdonald showed this concern but none more vocally, or with such conviction, than Professor Stuart Hill. He not only reads, talks, and lectures on what he believes but also practises what he preaches in his own backyard. His garden is grown organically and a compost pile takes up one corner of the yard. He feels his family are eating



better-tasting, more nutritious foods, and they are saving money. This statement concerning nutrition is one which the Centre hopes to study; since the data presently available are preliminary and often conflicting.

Professor Hill's backyard limits were extended when Mr. David Stewart of the Macdonald-Stewart



Professor A. F. MacKenzie

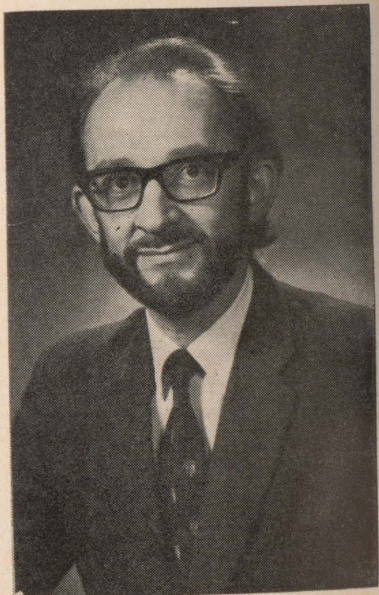
Foundation offered the College financial support to study the feasibility of a new approach to agriculture and to establish a Centre if it were found that one was warranted. After months of meetings and a two-day workshop attended by some of the continent's outstanding figures in

agriculture, nutrition, and health, the Steering Committee concurred as one that a Centre should be established on the Macdonald Campus.

As Professor Mackenzie pointed out: "We all agree that agriculture cannot continue on the way it has been going. We're on a collision course with our resources if we do. We have problems with land resources because of urban expansion. We have problems with our energy resources. In future, fertilizer resources may become a problem, and we should still be concerned about our water resources. I hope we can develop a kind of agriculture that will be less influenced by these resource problems. The greatest resource of all, the human resource is one on which agriculture heavily depends. We need to find out if the decrease in the farming population is good or bad. If it's bad for agriculture, how do we reverse this drain of rural people? Another question: how will people return to the land — will they work on their own farms or on large farms?"

Professor Hill feels that integrated pest control methods should be developed and is concerned about availability of suitable genetic material for a low-energy agricultural system. "Most of our crops and livestock are adapted to high-energy input systems; we are suffering from genetic erosion right now. There is good cause to be interested in this area on the academic side; on the practical side the people already using ecological methods of farming require the services of an agricultural institution such as ours."

"We have accepted the challenge of looking at new approaches to agriculture and for good reason," said Professor Touchburn. "There have been too many problems with misuse, overuse, and abuse whether it is chemical fertilizer or pesticides or antibiotics. We have to start thinking twice before following a traditional approach and consider the broader implications."



Professor S. B. Hill

Another reason for the Centre's existence that will be followed with interest by both scientists and laymen was pointed out by Professor Neilson: "We are concerned that many unsubstantiated claims are being accepted by the general public. We need to carry out research to test theories that are



based largely on casual observation and not on controlled experiments."



Professor H. Neilson

As can be seen, a mandate for action has been handed to the new Centre and to its administrative staff. The Director, to be appointed by the Faculty, will work with a Board of Directors, eight of whom will be faculty members and eight non-faculty. The Steering Committee suggested that the non-faculty members represent the farming community, the consumer, the federal and provincial gov-

ernments, medicine, industry, and the student body as well as other areas.

"The diversity of interests represented by such a board will add to the credibility of the undertaking. They will be focusing on a topic of great current interest and trying to bring it into the realm of scientific agriculture," Professor Neilson emphasized.

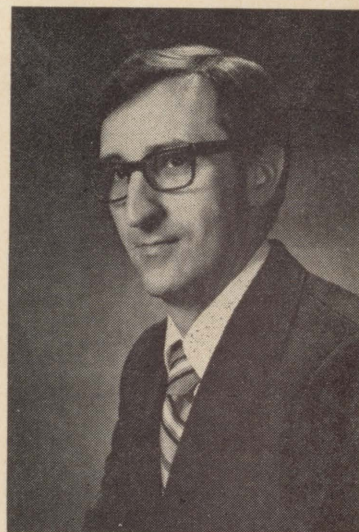
For the time being, the Centre will be in existing facilities, but it is hoped that a suitable "ecological building" will soon be built incorporating such concepts as solar heating, wind energy, and the recycling of wastes. Such a building would be an exciting environment offering the necessary stimuli for the exchange of ideas and the integration of research, teaching, and extension activities.

The Centre's research objectives are long-term, problem oriented, holistic, and multidisciplinary and will cover such areas as:

- soil-organic matter, productivity, and food quality
- low-energy systems of food production
- marginal land use
- recycling
- preventive and integrated pest control
- nutrition and health

A challenge for the Centre is the tendency for research to be conducted only in specialized disciplines with little thought being placed on overall results. An overview is needed and thus an integrated approach involving,

for example, soil scientists, plant scientists, animal scientists, and nutritionists working together.



Professor S. P. Touchburn

Although the Centre must think in terms of world energy problems and world food problems, it will do so in the context of eastern Canadian agriculture. The Centre cannot and does not expect the Quebec farmer, for instance, to suffer a loss in production. It hopes to prove to the farmer that there are viable alternatives in some areas of his farming system and it hopes that farmers them-



selves will become experimenters. In this way there can be a two-way flow of information between the scientist and the practitioner.

"We cannot feed ourselves in Quebec under our present nutritional standards with the land area we have," Professor Mackenzie reported. "We have one acre per person now; by the year 2000 we will have 1/2 acre of good, arable land per person. This points out that there must be no loss in production and it also emphasizes the need for land use planning and the study of marginal land uses. If land pressure is going to get to such a point that we have to consider swamps and sloping lands for production, then we must be prepared to come up with a lot of answers to questions concerning economics, environmental damage, soil erosion and so on."

"There are things that can be done", said Professor Touchburn. In the hilly, rocky country of West Virginia beef producers have developed quite a broiler industry. The main reason for keeping the broilers was to provide manure for beef pastures. It was a re-claiming process for improvement of fairly poor land. In Ohio an effort has been made to improve stripped bank soil using animals and various kinds of planting that can tolerate less than ideal conditions.

"We certainly do not want to be associated with lower production," he continued. "We may have to look for long-range beneficial

effects that will require a gradual approach. One problem is that many idealistic people are unrealistic in their goals. Perhaps it's a matter of being ahead of their time but in the immediate future we have to be a little more practical and realistic as to what we can accomplish. We may have to wait for another generation to accomplish some of the goals."

On the more positive side Professor Stuart Hill stated that there are cases where both small farm holdings and large, intensive farms in Canada and the U.S. practised ecological methods without any loss. "A present study of 16 organic and 16 conventional farms in the U.S. Corn Belt surprisingly found no difference in productivity or farmers' income but a marked difference in energy dependence. The organic farms operated on a third the amount of energy, which is very significant in a world of increasing energy costs."

He receives many questions from farmers in the Eastern Townships, in the Gaspé, and in other parts of Quebec who want to know how these farmers were able to do this. While we can make suggestions much more research needs to be done in Quebec to make these more reliable.

Some areas of research will receive top priority. Others will have to be kept in a "pending" file.

"We have to consider not only production agriculture but its close

relation to health," said Dean Blackwood.

Professor Neilson stressed that "surveys of eating habits and diets could be started immediately. As the consumer needs information concerning good food and good nutrition, I cannot emphasize too strongly the value of initiating a consumer education program."

Initially the teaching role of the Centre would be fulfilled through the establishment of a Seminar course and a Special Topics course. Further teaching and extension programs would develop as needs become evident. Dean Blackwood emphasized that initially the Centre's students would be part of an existing disciplinary unit within the Faculty, but that they would naturally be influenced by the Centre's integrated approach to problem solving.

By sharing a focal point in the Centre and in a specific department, Professor Hill feels that "it will broaden the experience of the practitioner that is coming out. It does not mean that he will be less qualified; on the contrary he is going to be more broadly qualified than he is at the moment yet without the sacrifice of depth."

One innovation that the Centre would like to try is to have summer courses for students when they can put into practice some of the theory absorbed in lectures and labs. We have the facilities here at Macdonald and it would be a tremendous opportunity, providing financial support can be given to the students who would otherwise be working to earn money for the next year's tuition.



There are many reputable institutions and individuals whose expertise will be of value to the Centre. Professor Hill has collected an extensive working, resource library of books, papers, films, and other sources of information. With materials from other staff members it will form the nucleus of a documentation centre from which, in due course, the Centre's own information will emanate. This brings us to extension, the third major area after research and teaching. One of the main aims of the Centre will be working and communicating with the community it hopes to serve. Extension activities will emphasize the nutrition education of consumers, and an annual conference will be held on aspects of current concern in agriculture and nutrition.

Some of the questions set forth in the opening paragraph of this article may be answered through evening courses, short courses, newsletters, mobile teaching units, and the mass media. The two-part article in the November issue of the Macdonald Journal on "Composting for Farm and Garden" is but one example of the type of material the Centre might put out.

"In the nutrition area there is a pressing need for a preventive approach to ill health . . . we have to show consumers how to safeguard their health," said Professor Hill.

Professor Touchburn feels that "we've developed a generation that is eating too much refined food. We've lost the tradition of eating sensibly because of the

availability of instant foods. People have to be re-educated as to how to eat."

The producer, too, must become more in tune with what he is working with. Wouldn't the proper initial care and management of livestock be a better alternative to the present heavy use of antibiotics? That's one of the many questions that is being asked. Answers often infer we will have to revert back to practises of 30 or more years ago. As was pointed out this new agriculture will incorporate many components of old-fashioned agriculture, but it will also involve many new concepts and new techniques. Initially, some of the techniques may be more labour intensive but once a better system is established, it could require less work. As an example, Professor Hill said "Pests could be controlled by creating an environment in which pests do not develop. It takes time to build such a system up but once it's established there's less work."

The Centre expects an eager response from consumers who flock to the health food stores, from those who believe in preventative measures for the good health of both humans and animals, and from those farmers already practising ecological methods. But it is the firm belief of the people who worked hard to establish the Centre that all will benefit.

Professor Mackenzie expressed it best when he said, "We're going to do the same thing as we've always been doing — trying to answer a need. With the Centre we will have a lot more with

which to answer the need. More people, more money. We will be able to attack long-term problems that we haven't been able to attack before. We will be able to attack problems that government has not seen as a priority. Times are changing and the needs are too."

Soil, food, health. These are the vital components in man's survival. An alternative approach to agriculture is needed and with the support of Macdonald College, the expertise of its staff, and the generosity and foresight of Mr. David Stewart, it is hoped that the Centre can meet the challenge.

There will be conflict no doubt from within and from outside the College. Conflict can be healthy; indeed, it is desirable and if the Centre does nothing else but stimulate scientific interest in a new approach to agriculture, then it will be taking a step in the right direction.



# Macdonald Reports

## RESEARCH AT MACDONALD

Part of the purpose of the quarterly "Macdonald Reports" column is to keep the community up to date on research developments which come out of the College. If readers think of Macdonald College strictly as an Agriculture and Food Science College, they will probably be surprised to learn about the following work being done by Dr. I.W. DeVoe of the Microbiology Department.

Dr. DeVoe's research involves epidemic meningitis, a bacterium-caused disease which attacks mostly children up to around 12 years of age. This disease ranks 10th as the cause of child fatalities in North America and, even though it is most commonly seen in epidemic form, isolated cases have increased in the last year, especially in the North West Territories and Newfoundland. In its mildest form, epidemic meningitis causes infection of the meninges, which are the membranes covering the brain. More severe cases involve blood clotting in the skin and major organs (mainly the kidneys and lungs) which is irreversible and leads to death.

At this time, virtually nothing is known about the mechanisms which the bacterium has for causing epidemic meningitis. However, Dr. DeVoe's research has uncovered the following physiological data which shed light on what is happening at the body cell level during the course of meningitis. We have long known that our white blood cells are usually our first line of defense

against disease; they attack, engulf and digest harmful bacteria. In meningitis, Dr. DeVoe has found that the white blood cells "spit out" degraded parts of the disease bacteria, which, in turn, cause a shut-down of the detoxifying mechanism in the body. The toxin of the bacterium then is free to cause the clotting process which appears in severe cases.

Intensive study was first made in rabbits; then in Brazil during their epidemic of meningitis last September, Dr. DeVoe and his colleagues had a chance to collect and examine spinal fluid from infected children and tissues from those who had died of the disease. His previous findings in animal experiments were confirmed in humans.

Looking at the possibilities of a cure, it is felt that perhaps the proteins on the surface of the disease bacterium may have vaccine potential. Beating epidemic meningitis will take the work of many interested scientists such as Dr. DeVoe — when all the puzzle pieces are fitted together, there may be hope for the future. It is to our credit that a staff member of Macdonald College is part of the team.

## COMPARATIVE AGRICULTURE COURSE

For many years, a number of professors at Macdonald College have been deeply involved in international agriculture; they have travelled abroad for extended periods of time as agricultural personnel in many tropical and developing countries. Up until recently these men have always worked on their own individual

projects, but last winter they met together with the idea of pooling their expertise and experience for the benefit of the students.

Plans emerged for the new course in Comparative Agriculture, organized by Professors Donefer, Stepler, van Lierop and Warkentin, which is designed to serve both the student body and the general public as a credit or non credit course. Such diverse topics as physical resources, crop resources, marketing and extension, animal resources, international aid programs, rural development and world food production will be discussed in a 12-lecture series, on Tuesday evenings, beginning January 13, 1976.

The new course has several objectives. It will attempt to give Canadian students, especially those thinking of work overseas, a background in the agricultural set-ups of developing countries. At the same time, the course should help foreign students at Macdonald to "build bridges" between their methods and conditions of agriculture and ours in eastern Canada. An international exchange will help both Canadian and overseas students to develop new directions for thought.

With the success of this one new course, expanded areas of study may be planned — Macdonald College could become, in the future, a resource, research and teaching centre for International Agriculture.

## D.H.A.S. ON THE MOVE

It is difficult to write an up-to-date progress report on Dairy Herd Analysis Service (D.H.A.S.). But



the problem is a welcome one! As fast as all the facts are gathered and printed, they are out of date again — the speed at which this service to the dairy farmer is growing shows a real success story.

Although statistics tend to be dry, they round out the picture. From its modest beginning in April, 1966, with 980 cows registered in the program, a staff of five and a budget of \$27,000, D.H.A.S. has grown into a province-wide organization serving all 12 Agricultural Regions in Quebec. There are now 135,000 cows on D.H.A.S., requiring a staff of 41 (full or part-time) at the College and 64 supervisors in the field. In just over nine years of operation, that's an average increase of over 1,200 cows per month and a new staff member each month. The current working budget is 1.6 million dollars. The growth rate of Dairy Herd Analysis proves that the farmers are well satisfied with the progress of their herds.

The founder and developer of D.H.A.S., Dr. John Moxley of Macdonald College, has played an enormous part in the success of this program. It is often said that he is way at the top of the list of scientists who have made a direct contribution to production agriculture in Quebec. On September 20, at a D.H.A.S. convention in Levis, staff, supervisors and representatives from the Ministry of Agriculture honoured Dr. Moxley with a plaque in praise of his work in this field.

We've all heard about the cow that jumped over the moon. Well,

the whole D.H.A.S. organization seems to be helping her to get so high!

### NEW DIPLOMA PROGRAM

The proposed new curriculum of the two-year Diploma program at Macdonald College should prove very exciting to future "Dips". Plans are for periods of on-the-spot farm practice, with students working on various types of approved farms, interspersed with blocks of classroom lectures and labs. Graduates from this new program will, hopefully, be better trained with a broad, practical and up-to-date education in modern agricultural techniques of eastern Canada.

### QUEBEC FARMERS' ASSOCIATION MEET THE MINISTER

Annual Meeting day was November 10th, at Macdonald College. A good crowd of farmers, many accompanied by their wives, arrived in the morning to participate in the business session. Many more attended in the afternoon to hear Kevin Drummond, Minister of Agriculture for Quebec, give a short talk and answer questions.

It was a very full day — the revisions of the constitution, studied in committee during the summer, were read, discussed, and approved; a new Board of Directors was elected, (see below); reports were given by various groups, which showed, for the most part, active participation in many worthwhile projects, such as information meetings, scholarship presentations, ownership and maintenance of a picnic area for public use, fair booths,

etc. Groups having difficulties sustaining interest were able to pick up several good ideas from these reports.

A highlight of the day was the introduction of the new Minister of Agriculture, Kevin Drummond. In his short speech, he told us that he welcomed the chance to talk to the farmers and to learn from them, that he didn't necessarily have all the answers, but felt that through a joint effort of the Ministry of Agriculture and the farmers, problems could be solved. He mentioned several areas of concern that the Department of Agriculture was working on. These included the regulations relating to abattoirs, which he felt were unworkable in their present time frame and needed adjustment; the beef industry in Quebec and the need for a stabilization program; the legislation for modernization of dairies; Crop Insurance Act amendments; the Agricultural Land Zoning Act, which should be tabled before Christmas and ready for public commission hearings; the Revenue Insurance Bill has been passed and work is being carried out on production costs; how do we communicate in English in a province which is largely French?

With Marc Côté, from CBC Midday Magazine, acting as moderator, Kevin Drummond asked for questions from the floor. The response was excellent and we feel that a few of the more common and urgent questions and the answers given by Mr. Drummond are well worth reporting.

Question: With regard to stabilization of the beef industry for the





Left: Doug Johnston, Past President, turns the question-and-answer period over to Kevin Drummond, Minister of Agriculture, and Marc Côté, Midday Magazine. Below: Fred Albers, Foster Que., the new provincial President, is not singing — he's asking the Minister of Agriculture about the beef industry.

farmer: what is the timing — what sort of action should we expect and when will we hear from the Department of Agriculture? We're into the winter season and need to have answers. Should we increase or reduce our herds?

Answer: Since Quebec is producing only 20 per cent of its own beef needs, we should have a beef industry. We're not after subsidies per se, but a long-term plan like stabilization; we must look at the real costs of production so that the producer can get his fair share. We must work toward keeping our economic fall-out here instead of shipping steers to Ontario. We will have a problem this year, but beef is a priority and an announcement on policy should be made soon.

Question: Are the subsidies for dairy for processors or producers. Who will benefit?

Answer: These are not subsidies, but loans for the modernization of dairies, so that they can face competition and give the dairy producer a better price for his milk, thus putting the milk industry on a better footing. So both producer and processor benefit.

Question: I'm a consumer and I'm paying \$2 a pound for rump roast, yet you have to subsidize the farmer. Who's making the money?

Answer: Seven reports from Ottawa say that no one is making much. But it's the farmer who has no control over the price of

his inputs, e.g., baling twine increased from \$5 to \$27 a roll. He's in more of a squeeze than the consumer.

Question: Can we get English information from the Department of Agriculture in the future. Things are getting worse instead of better.

Answer: I know there's a problem, but there can never be complete English service in a province that is 90 per cent French. We don't have enough translators, although there are two openings which haven't been filled, but we will try to do better. It won't be immediate because there are these physical limitations. The fact is that the English haven't wanted to work in the Quebec government and there isn't the English representation there should be. The civil service is 98 per cent French.

At a reception given for the Minister of Agriculture after the question period, many people congratulated Kevin Drummond on his interest and straightforward answers, especially since he is very new to his office.

Executive and Board of Directors, 1975-76

Past President: Doug Johnston, Stanstead  
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## Looking to the Future

by George D. Weaver,  
Post-graduate Student,  
Department of  
Agricultural Economics

### Introduction:

Chickens, turkeys, and eggs are the focal point of much attention today, particularly with regard to marketing boards, supply management, and import controls. Unfortunately much of this attention has been directed to these areas specifically, neglecting some of the more important areas requiring consideration: the overall growth of these sectors, future opportunities for expansion, trade competitiveness, and optimum utilization of input resources.

Quebec plays a very important role in Canada's poultry economy and developments in this area will have a direct impact on Quebec agriculture. This article discusses the present position of the Quebec broiler industry, some of the problems it faces, recent trends, and the present status of the proposed National Chicken Marketing Plan.

### The Broiler Industry and Quebec:

Quebec ranks fourth in Canada in terms of provincial agricultural production following Ontario, Saskatchewan, and Alberta. In 1974 Quebec farm cash receipts totalled a record \$1.16 billion, 13 per cent of total Canadian farm cash receipts.

Within Quebec, the poultry industry is the third largest production sector, accounting for close to 13 per cent of total farm cash receipts. This compares with 35 per cent for the dairy sector and 15 per cent for the hog sector.

Approximately 80 per cent of poultry cash receipts were derived from the production of broiler meat.

In 1973 there were 26 poultry processing establishments in Quebec providing employment for over 3,200 persons. Salaries and wages totalled \$19.1 million and value of shipments was in excess of \$173 million. Quebec recorded the highest value of shipments of all the provinces, and accounted for 35 per cent of the total Canadian output. Approximately 70 per cent of this activity was the processing of broilers.

In the input sector broiler production also gives rise to a significant proportion of business. For example, shipments of complete broiler ration from feed manufacturers in 1973 comprised 30 per cent of all complete feeds sold in the province of Quebec.

The well-being of the poultry industry, particularly the broiler sector, is of vital interest to Quebec agriculture both at the production and processing levels. Further, a significant proportion of the farm input sector, especially the feed industry, is dependent upon the production of broilers in Quebec.

### Quebec In Canada:

Quebec is the largest producer of broiler meat in Canada in terms of output and value. In 1974 it accounted for 33.7 per cent of the value of Canadian production, followed closely by Ontario with 33.1 per cent.

It appears, however, that Quebec is losing its position of dominance in the industry. In 1970 it was responsible for over 43 per cent of physical production, compared with 38 per cent in 1974. Ontario's percentage of physical production increased during this same period from 32 per cent to 35 per cent.

Most broilers produced in Canada are slaughtered at a weight of four pounds or less. In 1974 35.6 per cent of this production occurred in Quebec. Broilers over four pounds comprise about 15 per cent of total slaughter. In this category Quebec is by far the largest producer, being responsible for about 60 per cent of production.

### Broiler Prices:

Historically prices for broilers have varied considerably among provinces with Quebec consumers usually paying the lowest prices for both fresh and frozen chicken. However, Quebec producers usually received the lowest prices for their product compared with other provinces. These price differentials have narrowed since the end of August, 1975, and prices at all levels are now fairly even across the country.

In 1974 the average retail price per pound for broiler meat in Montreal was 81.5 cents for fresh product. In Toronto the average price was 82.9 cents, in Winnipeg 83.2 cents, and in Vancouver 88.1 cents. Thirty-nine per cent of the Quebec retail price went to producers, 32 per cent to processors and wholesalers and 29 per cent to retailers. The average break-



down for all provinces was producers 41.4 per cent, processors and wholesalers 32.5 per cent, and retailers 26.1 per cent.

### **Consumption:**

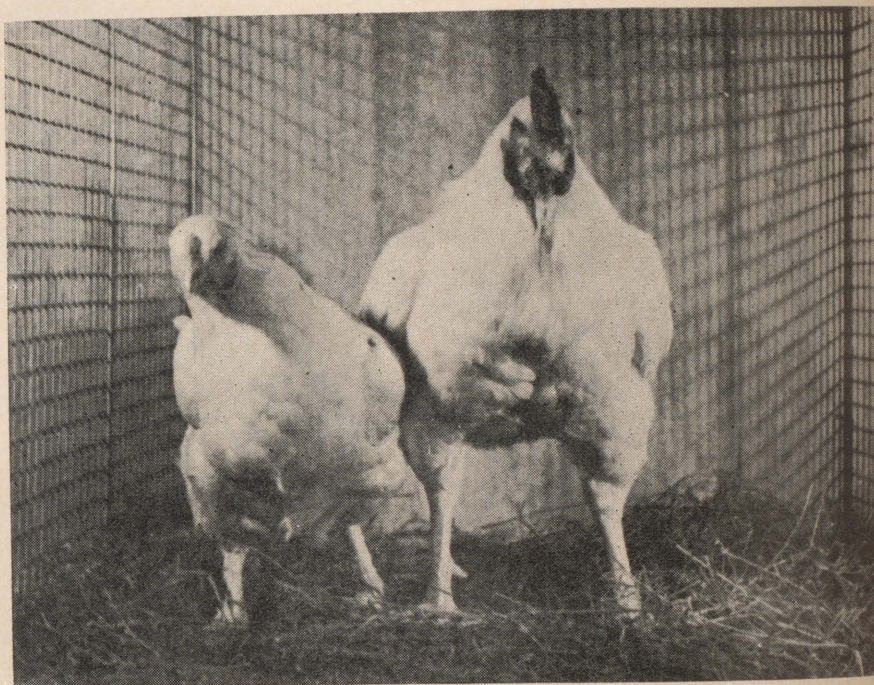
Chicken is an excellent food product. It is almost universally liked by those in every age group and has a wide acceptance across every income bracket. It is nutritious (being a good source of protein) and easy to prepare.

Consumption of poultry meat in Canada has shown a remarkable increase since 1949. This increase is even more pronounced when compared with the increase in per capita consumption of other meats and dairy products. However, since 1970 per capita consumption has not increased significantly (in 1974 it was 31.0 pounds per person versus 31.3 pounds in 1970).

Total consumption of broiler meat in Canada declined in 1974, and storage stocks rose to a record high, averaging 31.9 million pounds per month. An apparent oversupply situation had resulted and broiler production across the country was cut back. This cutback has continued throughout 1975 and total production is expected to be below 1974 levels. The exact causes of this decline in consumption have not yet been adequately analysed.

### **Competitiveness:**

At the present time Canadian prices for broiler meat at the producer, wholesale, and retail levels are substantially above



U.S. prices, resulting in a boom of imports from this country. In 1974 imports of live chicken for slaughter averaged 164,000 pounds per month: for the one week period ending October 4, 1975, 221,735 pounds were imported. Imported carcasses in 1974 averaged 446,000 pounds per month: for the week ending October 4, 1975, 319,848 pounds were imported.

In 1974 Canadian exports of broiler meat totalled a record 20.5 million pounds. Most of these exports originated in Quebec and Ontario and were destined for Hong Kong, Cuba, and Singapore. This record figure, however, is not indicative of an improved trade position: average export prices for proc-

essed broiler meat were 18.6 per cent lower than the average Canadian wholesale price. The average export price was 49.1 cents in 1974 compared with an average wholesale price of 59.5 cents. This export price was only four cents above the average producer price adjusted to eviscerated equivalent (there is a weight loss of approximately 25 per cent in processing).

This export price situation seems to indicate that exports are largely a means of disposing of excess supply. This is further supported by the fact that in 1971 and 1974, years of very high exports, production and consumption of chicken in Canada decreased significantly.



### Problems and Implications:

Two major problems appear to be facing the broiler industry in Canada today: a disequilibrium of supply and demand and a deteriorating competitive position. Until recently the broiler industry was one of the most dynamic segments of Canada's agriculture and food system. The question now is, "can this momentum be regained?"

At the moment the factors influencing the demand for broilers have not been properly identified, although work is now being done in this area. Whether or not relatively higher prices for broilers, compared with earlier years, are causing decreased consumption has not been determined.

Canadian producer costs have always been higher than those in the United States because of higher feed, chick, fuel, and labour costs. Compounding this situation is an apparent decline in the efficiency of the processing and distribution channels in Canada relative to the U.S. In 1974 producer prices in Canada were 12.1 cents per pound higher than U.S. producer prices. Canadian retail prices averaged 22.7 cents per pound higher than U.S. retail prices. This indicates that Canadian processors and distributors required 10.6 cents per pound more than their U.S. counterparts to process and market a broiler. In 1973 this difference was only 3.7 cents. This trend has continued into 1975: from January to April the difference amounted to 11.8 cents per pound.

Unless price differentials between Canada and the U.S. narrow, or restrictions are placed on imports, it is very probable that imports from the U.S. will continue to increase. At the same time it is doubtful if Canadian exports can be maintained at present levels since Canadian prices are considerably higher than prices in many major world poultry trading countries. It is interesting to note that while Canada is the world's eighth largest producer of poultry meat it is a relatively insignificant exporter, ranking fourteenth. In terms of imports it ranks fifteenth.

If Canadian poultry is priced out of world markets and domestic demand is not stimulated the possibility of stagnation in the industry arises. The effects of such a stagnation would be felt throughout the agricultural economy. As mentioned previously this is of particular relevance to Quebec.

### The Proposed National Chicken Marketing Plan:

Since early 1974 the Canadian Broiler Council, of which the Fédération des Producteurs de Volailles de Québec is a member, has been attempting to receive approval for a National Chicken Marketing Plan. The main objectives of the plan are to provide a planned production and orderly marketing program for chicken on a national basis and to manage imports of chicken to protect the viability of the plan.

The proposed plan had not been adopted as of October 31, 1975, owing to the National Farm Products Marketing Council's dissatisfaction with some parts of the plan. Hearings are expected to be held soon on the proposed plan.

At this point it is difficult to assess the impact of such a plan on the broiler industry as a whole. It would be unfortunate if its energies were devoted to maintaining the status quo rather than restimulating the ability of the industry to grow and progress. There are no inherent reasons why the industry cannot compete effectively in world markets since the resources, infrastructure, and technical ability for broiler production are well developed in Canada. Whether or not a National Chicken Marketing Agency would tackle these problems remains to be seen.

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# *S-T-R-E-T-C-H-I-N-G*

## *THE GROWING SEASON*

(We recently interviewed Dr. H. R. Klinck of the Agronomy Department. Questions will appear in italics.)

*We understand that you use a winter nursery at Brawley, California. Could you tell us about the set-up there?*

**Dr. Klinck:** The winter nursery was set up in the Imperial Valley in southern California by the Canada Department of Agriculture a number of years ago to permit the winter increase of certain materials and therefore speed up the whole program of development of new varieties. The nursery is on a farm which is rented from a group in the valley. The land has to be irrigated because the rainfall is less than two inches a year so they have good control over the moisture conditions. They can grow excellent crops, thus making it a good place for winter increases.

The material that we are growing down there is grown for us as a service by the Canada Department of Agriculture who ask us every fall if we are interested in multiplying some material there. In certain years we send them seeds that they plant and harvest for us and send back. They usually plant in November and harvest in April which means we get the seed back in time for spring planting here. The advantage is that it is a standard farm-size area, which is not as restrictive as a greenhouse or growth cabinet. It is really quite useful.

*Are you the only person from Macdonald using the nursery?*

**Dr. Klinck:** Yes, I'm the only one from here that has material growing down there because it is limited to the cereals.

*You mentioned the advantages; are there any problems?*

**Dr. Klinck:** As you may realize, in cereal crops there are problems with daylength response. If oats or wheat are grown in the greenhouse under our short days without any artificial light, they'll grow for months and months without heading, without flowering. This can be overcome by simply turning on some lights for a couple of hours during the night, thus breaking the long night period. This stimulates the reproductive mechanism. There is the same sort of problem when this kind of material is moved closer to the equator where the average daylength is around 12-13 hours. With barley there is not too much of a problem. At the average daylengths in southern California it will grow pretty much at a normal rate. Mind you it does take somewhat longer then it does here in the field. The temperatures are cooler and the days are shorter so the season is prolonged, but nevertheless it does head up and ripen in time for us to get it back here. With the normal oats which are grown in Canada it's impossible to do winter increase there because these varieties must have the long-day stimulus—or short-night stimulus—to induce the heading. When I was in Brawley on the first of April some of the oats material that had been sent down from the Research Station in Ottawa was still green as grass with no heads in sight. However, several years ago, Dr. V. D. Burrows, Head of the Cereals Crops Section at the Ottawa Station, introduced into his program some material which was daylength insensitive. The varieties would grow independent of the daylength and that material down there was headed and ripening

beautifully — just like the barley. In our own case we had some barley and some spring wheat there that were from crosses which had daylength insensitive parentage, and they were heading quite normally. But there were one or two crosses that were between Canadian varieties that didn't have this daylength insensitive response and again they were like the oats. There was no way they would even ripen until sometime in June. This is the one restriction there is. Mind you, the Ottawa people did experiment by setting up very strong lights on poles out in the field. They grew oats under these and turned on the lights in the middle of the night just as we would do here in the greenhouses. This worked, but it is very expensive and the area that you can do it in is limited.

Another problem is that it is very flat country for surface irrigation and you get tremendous wind storms. The result of this is that a lot of the barley heads, in my particular lines, had broken off and were lying on the ground. This was before they were ripe. I suppose the material that we selected and brought back was wind resistant, but whether it had any other advantage I don't know as yet.

It was almost like old home week when I was down there in April — we could have had a plant breeders convention! Practically all of the barley breeders and a number of wheat breeders in Canada make use of the facilities at Brawley. It really is quite an interesting place to visit. We had a great time looking at each other's material and seeing what we had.



# The Family

# Farm

Published in the interests  
of the farmers of the province  
by the Quebec Department of  
Agriculture.

## Beef Production in Quebec

by J. B. Roy  
Information Division

For about the past year, beef production in Quebec has once again been making the headlines. Unfortunately this publicity has been accompanied by a note of pessimism which makes one wonder about the future of that industry here. In fact one of the conclusions reached on April 25 at a seminar in Sherbrooke organized by the Quebec Livestock Productions Council, the Quebec Department of Agriculture and the Quebec Beef Cattle Breeders Association was that "beef cattle raising in Quebec has reached an absolute dead end."

Jacques Lebeau, agricultural economist at the Ste. Foy research station, justifies this statement as follows: (1) government programs and research are slanted towards the finishing of feeder cattle but 90 per cent of our beef is produced by the cow-calf method; (2) the most popular beef breeds in Quebec (namely Hereford and Aberdeen Angus) are the same as in western Canada; (3) research on feed rations is largely patterned on western research (based on feed grains) even though Quebec produces barely 25 per cent of the feed grain it needs; (4) emphasis on record rates of gain and grades by both researchers and beef cattle raisers has now reached the point where they are forgetting the economic aims of the farming enterprise.

Such is the context of the foregoing statement about beef in Quebec — a livestock production

which is not necessarily doomed to decline — whatever the present situation might lead one to believe.

## History of beef raising in Quebec

The first ventures at raising beef cattle and forming dual-purpose herds were made in the Eastern Townships. The first introductions of beef cattle were made especially in the counties originally settled by the United Empire Loyalists who came to live in Canada after the American Revolution. While French-Canadian farmers were striving to improve the cattle of French ancestry from which the French-Canadian breed was later formed, their Anglo-Saxon colleagues were importing cattle — chiefly breeding stock — from the lands of their ancestors. Amongst interesting historical details, the following may be cited: the first animals of the British breeds imported into Canada came via the Eastern Townships before being introduced elsewhere or into other provinces. Shorthorns were introduced into Canada in 1826 through New Brunswick, and the Herefords first introduced into Ontario in 1860 passed through Quebec before reaching their destination.

The beef-cattle raising and importing centres set up by settlers of British origin greatly helped to improve the situation in Quebec. It is in the predominantly English-speaking counties that beef herds have become firmly established and have in general succeeded. The Eastern Townships remain a good beef region and beef cattle are now to be found throughout the province, particularly in the counties of the

North-of-Montreal agricultural region — for example Papineau and Pontiac — and in northwestern Quebec and in many other areas such as the Lower St. Lawrence. Most of the cattlemen belong to the Quebec Beef Cattle Breeders' Association. During the past 15 years this beef industry established in Quebec over a century ago has been experiencing a revival in popularity after going through a more or less static period. From 25,000 in 1960, the number of cows kept for beef purposes has risen to over 200,000 in 1975. Three factors seem to be mainly responsible for putting the industry back in the saddle: an increasing scarcity of labour for operating dairy herds; a search by farmers for branches of livestock raising which will tie them down less than the traditional ones; and the popularization of artificial insemination by the St-Hyacinthe A. I. Centre.

In view of Quebec's big deficit in beef production, idealists might think that the industry should be developed to such an extent that, in a few years, the present gap (amounting to thousands of head) between production and consumption would be eliminated. Thus the millions of dollars drained away annually by beef imports would stay in the pockets of Quebec farmers and increase Quebec's farm income. However, a closer look at the real situation shows that this ambition is a dream.

## The actual situation

In 1972 to satisfy a real per capita beef consumption of 104.5 pounds,



Quebec used 633.2 million pounds of beef, or the equivalent of 1.1 million head of liveweight each yielding about 570 pounds of meat. In that year, 276,000 cattle were slaughtered in Quebec yielding 158 million pounds of meat, i.e., only 25 per cent of requirements.

The production is not only greatly deficient in quantity; it is also of inferior quality — as witness the carcass grades received in abattoirs under federal or provincial government inspection in 1974. In that year, of the three million carcasses graded in Canada, 67.4 per cent were graded A and 19.5 per cent D. In Quebec these proportions were almost reversed, 66.4 per cent of the 165,717 carcasses graded in abattoirs being graded D and only 16.5 per cent A. Moreover, nearly 75 per cent of Quebec cattle graded D in the abattoirs were put into the lowest sub-category, D<sub>4</sub>.

Commenting recently on this situation in a paper on the beef industry, Ferdinand Ouellet of the Agricultural Economics Department of Laval University attributed it to the absence of a beef cattle industry. The major part of our beef production is derived from our dairy industry and is therefore not subject to the same economic laws as beef cattle raising. It is influenced by the meat industry but is linked to producers' decisions based on the dairy products market, as is clearly shown in Table 2, "Number of Cows, Canada". While the number of beef cattle has risen steadily since 1961, the number of dairy

cattle has continued to decline. This is due to the ceiling set on our milk production and also an increase in yield per cow.

Turning now from beef production to vealers or butcher calves (not

to be confused with feeder calves) we find that in 1972 Quebec produced 63 million pounds of veal or 432,000 animals each yielding 146 pounds at slaughter, to satisfy a real consumption of 6.7 pounds per capita or a total

Table 1. Beef carcasses graded in federally and provincially inspected abattoirs in 1974

| Grade                | QUEBEC         |      | CANADA         |      |
|----------------------|----------------|------|----------------|------|
|                      | Number of Head | %    | Number of Head | %    |
| A 1.....             | 10,900         | 6.6  | 974,514        | 32.0 |
| A 2.....             | 12,305         | 7.4  | 795,303        | 26.1 |
| A 3.....             | 2,983          | 1.8  | 223,651        | 7.3  |
| A <sub>4</sub> ..... | 1,166          | 0.7  | 61,119         | 2.0  |
| B 1.....             | 4,352          | 2.6  | 151,247        | 5.0  |
| B 2.....             | 158            | 0.1  | 6,240          | 0.2  |
| B 3.....             | 42             | —    | 734            | —    |
| B 4.....             | 51             | —    | 235            | —    |
| C 1.....             | 5,502          | 3.3  | 136,497        | 4.5  |
| C 2.....             | 5,397          | 3.3  | 29,960         | 1.0  |
| D 1.....             | 5,817          | 3.5  | 103,679        | 3.4  |
| D 2.....             | 10,585         | 6.4  | 113,813        | 3.7  |
| D 3.....             | 19,529         | 11.8 | 102,383        | 3.4  |
| D 4.....             | 72,494         | 43.7 | 275,008        | 9.0  |
| E.....               | 14,436         | 8.7  | 53,628         | 1.8  |
| Ungraded.....        | —              | —    | 16,657         | 0.5  |
| TOTAL.....           | 165,717        | 100  | 3,044,668      | 100  |

SOURCE: Agriculture Canada report on the livestock and meat market in Canada.

Table 2. Number of cows, Canada 1961 to 1974

| YEAR      | — Millions of head — |           |              |
|-----------|----------------------|-----------|--------------|
|           | DAIRY COWS           | BEEF COWS | ALL COWS (1) |
| 1961..... | 3.0                  | 2.3       | 5.3          |
| 1962..... | 2.9                  | 2.4       | 5.4          |
| 1963..... | 2.9                  | 2.6       | 5.5          |
| 1964..... | 2.8                  | 2.8       | 5.7          |
| 1965..... | 2.8                  | 3.0       | 5.8          |
| 1966..... | 2.7                  | 3.0       | 5.7          |
| 1967..... | 2.6                  | 3.0       | 5.6          |
| 1968..... | 2.5                  | 3.0       | 5.5          |
| 1969..... | 2.4                  | 3.0       | 5.4          |
| 1970..... | 2.4                  | 3.2       | 5.6          |
| 1971..... | 2.3                  | 3.5       | 5.8          |
| 1972..... | 2.2                  | 3.7       | 5.9          |
| 1973..... | 2.2                  | 3.9       | 6.1          |
| 1974..... | 2.1                  | 4.3       | 6.3          |

(1) Owing to the simplification of some figures, the totals obtained by adding the number of dairy cows to the number of beef cows are not exactly the same as the totals for all cows.

SOURCE: Statistics Canada, Cat. 23.203



of 40.6 million pounds. Quebec's veal production thus exceeds its consumption by 55 per cent. However, the quality is deficient because many of the calves are slaughtered before reaching 200 pounds.

The statistics for cattle on Quebec farms on January 1, 1975, show that the number of cows kept for slaughter was 230,000 or 35,000 more than 12 months earlier. Similarly, the number of calves one year old or more rose from 265,000 to 305,000, and the number of steers from 48,000 to 59,000. In 1974 production (of cattle slaughtered or sold on the hoof) had a value of \$100 million at the farm or about 10 per cent of total cash farm receipts.

The fact that Quebec produces only enough beef to satisfy a quarter of its needs means importing about \$400 million dollars' worth a year. The situation is all the more distressing because it is marked by a deplorable under-use of the province's agricultural resources (available calves and pasturages, etc.) As mentioned, Quebec has a surplus of veal which it exports to other provinces and countries. But this situation appears more satisfactory than it really is. In reality, the high degree of self-sufficiency in veal results from an unwholesome state of affairs, in that the calves slaughtered for veal in Quebec might have helped to relieve the beef shortage if they had lived. The large deficit in beef would be reduced if the calves born in the province were kept and raised here. The self-sufficiency in veal is actually a sign of poor dairy-herd management.

### **Systems of beef-cattle raising**

Beef production involves two different fields of specialization: cow-calf operations and feeder cattle operations. Cow-calf operations account for about 90 per cent of Quebec's beef production and feeder operations for the remaining 10 per cent. In the cow-calf system, the calf is at first fed by its dam and, during the wintering period, this diet is supplemented with good-quality hay. In spring the calf goes out on pasture with the dam and is sold in the fall at about 410 pounds for feeding or slaughter. In a feeder operation, the steers are pastured during the summer or kept in a feedlot on high-energy feeds such as grains and corn silage until they reach a slaughter weight of 1,100 to 1,200 pounds.

As economist Jacques Lebeau remarks, it goes without saying that these two systems are markedly different from one another as regards feeding, management methods, and the financial risks involved. One cause of confusion on the part of Quebec farmers arises from the fact that over 90 per cent of beef production is by the cow-calf system whereas government research and programs are focused mainly on the feeder system. The cow-calf operators thus find that they are not provided with concrete solutions for making their enterprises more profitable—which would explain the Quebec farmer's want of interest in beef raising.

### **Government policies**

The Quebec Department of Agriculture has various programs

concerning beef production. Artificial insemination is aimed at the genetic improvement of the animals (the principal factor in productivity and profitability) and is also used to beget hybrids. On March 31, 1975, the Quebec A.I. Centre at St-Hyacinthe had 25 beef bulls of various breeds.

Amongst other programs to encourage beef raising are performance testing on the farm and performance testing at a station. There is also a subsidy in the form of wintering grants which is designed to encourage the consolidation, in certain areas, of calf-raising enterprises and conventional cow-calf herds which will be big enough to be profitable.

Under another government assistance program grants are made to associations of breeders of the four principal breeds kept in Quebec (Aberdeen Angus, Hereford, Shorthorn, and Charolais).

### **Marketing**

Cattle raisers sell their animals to abattoirs, packing-houses and trucker-dealers, and through livestock auctions and stockyards. At present there is no centralized marketing system. Livestock auctions are the preferred channel for selling calves, cows, and butcher cattle.

In 1967 the Royal Commission on Agriculture in Quebec drew attention to the following important shortcomings of Quebec's marketing system:

1. Livestock marketing suffers from a lack of organization. It





involves a variety of agencies subject to little legal control.

2. Transport of livestock is carried out by trucker-dealers, carriers, and buyers on commission, none of whom is subject to govern-

ment regulation. There are no standard rates for transport and the cost varies considerably.

3. The existing subsidy for the transport of livestock for slaughter may perhaps make it possible to achieve the object for which

it was originally designed, namely to improve the quality of "Canada approved" and "Quebec approved" meat, but it is giving rise to some unfortunate results.

4. There is considerable excess productive capacity in the slaugh-



tering industry in Quebec. Even the biggest packing-houses normally operate at 70 per cent of their output capacity and in regional abattoirs the average is below 45 per cent. Owing to the excessive slaughtering costs which it entails, this state of affairs helps to reduce the profitability and potential for modernization of the industry. In fact the profits of packing-houses and abattoirs are not over-high.

5. One of the factors contributing to this excess productive capacity is the presence of some 400 small local abattoirs scattered across the province that are not subject to any valid inspection.

The Commission concluded that "as a whole, the meat marketing system in Quebec is both costly and inconvenient." Although this conclusion dates back to 1967, the few improvements which have since been made to the system would scarcely lead one to qualify the finding.

#### **Favourable factors**

In the draft of its integrated agriculture-food Plan, the Quebec Department of Agriculture lists at least four factors which favour the growth of beef production, as follows:

- better use of dairy herd potential;
- better dairy herd management methods could yield beef of better quality and in larger quantities.
- availability of calves

Every year nearly half a million calves are killed on the farm, sent to abattoirs or exported before reaching 200 pounds. This leaves us, for replacement or fattening, some 350,000 calves of which about 70,000 would be for fattening. There is thus a considerable potential to be exploited in Quebec. The dairy cow's calf is still too often considered as a by-product of little worth.

#### **— low-cost land**

For one reason or another, dairy farms are set at liberty every year. These farms, with the necessary forage facilities, could be transformed at no great cost and used for raising beef.

#### **— increasing grain and forage production**

More and more grain and forage is being grown in Quebec, especially grain corn and fodder corn. This development is increasing the available feeding resources and makes it seem reasonable that part could be fed to cattle in feedlots.

#### **Abattoir capacity**

Quebec's present system of abattoirs and meat processing plants can take care of an increased beef production without taxing its capacity and even more economically.

#### **Obstacles to expansion**

The chief obstacles to an expansion of beef production in Quebec are lack of information and appropriate research, problems of feed grain supply, scarcity of capital, and the wrong mentality.

The beef crisis in the fall of 1974 emphasized the weakness in the industry resulting from lack of information at the level of the different agencies operating in it. To Ferdinand Ouellet, economist at Laval University, it seemed essential that a body of unquestioned impartiality be responsible for setting up an integrated information system, i.e., a system for collecting and disseminating all pertinent information on the meat industry as a whole, from producer to consumer. The importance of such an information system lies in the fact that the beef industry is composed of several independent links of very unequal strength. Moreover, since raw information is inadequate for a field as complex as the beef industry, the same impartial body should be responsible for interpreting the disseminated data so that they will be usable by the different ministries concerned in establishing their policies and by the different agencies involved in the beef industry.

The disclosures resulting from the inquiry into the meat industry in the spring of 1975 showed that supervision of quality was inadequate at many levels — livestock auctions, abattoirs, distribution, retailing.



Breeding (genetics) and feeding, two factors affecting meat quality, are already receiving attention from researchers, but market research for the types of meat produced in Quebec is still deficient. In addition, research should be stepped up with a view to providing all the technical information required by cow-calf operators and feeders.

A further obstacle to the rapid development of beef production in Quebec is the province's low degree of self-sufficiency in feed grain production. The financial success of feedlots is strongly related to the development of feed grain production.

Another constraint on beef production is the lack of financial means needed to establish breeding and feeding farms big enough to be profitable. However, the recent increase in the maximum total amount of loans which may be granted by the Quebec Farm Credit Bureau or the Farm Credit Corporation should help to solve this problem.

A rapid increase in beef raising enterprises is hard to imagine in the absence of qualified farmers or by cattlemen who have produced only milk for years. It must not be forgotten that the change-over from milk to meat with its accompanying reorganization involves not only the farmer and his mentality but also the whole farm.

### Objectives

As part of its agriculture-food development plan, the Quebec

Department of Agriculture has set, as a target for 1977, the fattening of 100,000 calves by groups. These calves would come from the 600,000 now slaughtered or exported often too young or too light. Feeding 100,000 calves to a slaughter weight of 500 pounds would give a yield of 50 million pounds on the hoof and 226 million pounds of beef in 1977. In terms of self-supply, this production would represent a proportion of 31.4 per cent.

The means of attaining this objective are as follows: better use of available resources on dairy farms, suitable extension and information, credit in keeping with beef raising enterprises, establishment of feedlots, assistance policies for cow-calf operators and feeders, rationalization of marketing, and the location of beef raising enterprises in suitable regions with due regard for sources of feed-grain supply and proximity to market.

Future prospects for cattle raising in Quebec depend to a considerable extent on the markets which will be available for the types of meat that Quebec is capable of producing at competitive prices and on the conditions on which the province will have access to these markets.

## Quebec Must Grow More Grain

by J. B. Roy  
Information Division.

The future of Quebec's livestock productions (from which our farmers derive 82 per cent of their income) is to a considerable extent closely linked with that of home-grown grain. Feed grains are in fact absolutely essential in all sectors of the livestock industry. Used in their natural state or crushed or ground, they form part of the ration of dairy cows, swine, poultry, and beef cattle. They are the main item in livestock production costs.

Although Quebec's climate is suitable for growing cereals — oats, wheat, barley, rye, and mixed grains — whose feeding value is widely recognized, their production falls far short of the need. Hence the province is dependent upon outside sources, mainly western Canada, for supplies and these are becoming increasingly difficult and costly. Quebec imports 60 per cent of the feed grains it needs. This dependence gives rise to problems.

There is good reason to intensify the campaign already under way to increase the acreages, yields, and quality of the grains grown on Quebec farms. Such steps in the direction of more complete self-supply are realistic and many farmers have already taken them. It is a matter of altering a mentality, changing habits, and putting to use all of Quebec's arable land



to the extent of local biophysical and economic possibilities.

### Acreages, Production, Consumption

A study of Quebec's grain acreages, production, and consumption leads one to the following conclusions: acreages are decreasing, production is barely holding its own, consumption is increasing, and 60 to 65 per cent of requirements are being met with grain from western Canada; Ontario, and the United States.

It is revealing to find that, in 1900, Quebec produced about 5,000,000 fewer bushels of grain from 800,000 more acres than at present. There has thus been a marked increase in yield per acre but also a decline in interest by farmers in growing feed grains. Fortunately this attitude has been changing during the past two years.

### Acreages

Table 1 shows changes in grain acreages in Quebec since 1931 and prompts the following comments:

1. The total acreage in grains was halved between 1931 and 1971. During the past four years it has remained fairly steady at about one million acres.

2. The decrease has been at the expense of the oat acreage, which has steadily declined to only 625,000 in 1974 — a loss of one million acres. Nevertheless, oats are still the principal grain grown in Quebec.

3. From 1970 to 1974 about 300,000 acres of the land in oats and 2,200 acres of the land in rye were turned over to wheat, barley, and mixed grains, whose acreages increased respectively by 20,000, 28,500, and 30,000 acres, and also to grain corn, whose total acreage in 1974 was 165,000.

### Production

Grain growing reached its peak in Quebec in the 1950s. In 1974 there were signs of a revival which it is hoped will continue in the year to come.

Nevertheless, even disregarding the exceptionally poor season of 1972 and 1973, grain production

is still tending to decline in Quebec. At the same time, grain-growing patterns have been changing, especially as regards the relative proportions of the different grains — particularly grain corn, wheat, and barley — even though such changes are masked by the instability of grain production.

Although showing a marked decline, oats are still in first place, with 23.8 million bushels in 1974. This represents 50 per cent of the total grain crop.

Since 1970 wheat and barley production has doubled after showing a declining trend. In 1974 the productions of these two grains were respectively 1.5 and 1.6 million bushels. Mixed grains are also on the increase (4.6 million bushels in 1974).

The vigorous introduction and spread of grain corn growing is helping to compensate for the decline in the volume of traditional grain caused by the setback to oats. In 1974 the grain corn crop amounted to 11 million bushels.

TABLE 1. CHANGES IN ACREAGES OF THE PRINCIPAL CEREALS, QUEBEC 1931-1974

| Years     | Wheat  | Barley  | Oats      | Grain Corn | Mixed Grains | Rye  | Total     |
|-----------|--------|---------|-----------|------------|--------------|------|-----------|
| Average   |        |         |           |            |              |      |           |
| 1931-1940 | 50,000 | 144,210 | 1,684,310 |            | 129,340      | 6130 | 2,013,990 |
| 1941-1950 | 14,740 | 94,240  | 1,460,700 |            | 201,100      | 3820 | 1,774,600 |
| 1951-1960 | 13,650 | 40,850  | 1,316,100 |            | 185,500      | 6090 | 1,562,190 |
| 1961-1970 | 22,730 | 18,600  | 1,079,700 |            | 98,860       | 4130 | 1,204,020 |
| 1970      | 29,300 | 24,500  | 925,000   | 93,450     | 95,000       | 4200 | 1,171,450 |
| 1971      | 39,100 | 38,052  | 695,009   | 137,927    | 122,975      | 1982 | 1,035,045 |
| 1972      | 41,000 | 42,000  | 680,000   | 140,000    | 126,000      | 2000 | 1,031,000 |
| 1973      | 44,000 | 51,000  | 675,000   | 119,000    | 120,000      | 2000 | 1,011,000 |
| 1974      | 60,000 | 53,000  | 625,000   | 165,000    | 125,000      | 2000 | 1,030,000 |



## Yields

During the past four decades, an increase of at least 30 per cent in yields per acre of all grains has slowed down the decline in production which would otherwise have resulted from the 50 per cent decrease in acreage. In 1974 wheat averaged 25.6 bushels to the acre, barley 31.1, oats 38.1, grain corn 70, and mixed grains 37.4.

The increased yields may be attributed to the following factors:

1. The disappearance of many small farms on which grain growing was considered by the farmers to be of little importance;
2. The introduction of new, better adapted varieties;
3. Rational use of herbicides, pesticides, and fertilizers;
4. Better drainage.

## Consumption

About 2½ million tons of feed grains are eaten by livestock in Quebec year by year. Only one million tons or 40 per cent of this is grown here.

Quebec's needs for grain for human consumption and industrial use amount to about 850,000 to 870,000 tons a year. Nearly half of this demand — corn and soft wheat — could be met with grain grown in Quebec. However, the emphasis is at present on steps to be taken to encourage farmers to bridge the gap in feed grains for livestock. The Quebec Department of Agriculture's self-supply program was designed with this in mind.

TABLE 2. INCREASES IN ACREAGES OF PRINCIPAL CEREALS — TARGETS FOR 1977-1978

| Region                               | Wheat   | Barley  | Grain Corn | Oats    |
|--------------------------------------|---------|---------|------------|---------|
| I.....                               | -20,000 | —       | —          | 13,000  |
| II.....                              | 25,000  | 26,000  | —          | —       |
| III.....                             | 9,000   | 12,400  | —          | —       |
| IV.....                              | 7,500   | —       | —          | —       |
| V.....                               | 3,150   | 3,400   | —          | —       |
| VI.....                              | 33,000  | 6,500   | 65,000     | —       |
| VII.....                             | 41,000  | 10,000  | 27,500     | —       |
| VIII.....                            | 6,400   | 1,450   | 14,650     | -20,300 |
| IX.....                              | 1,600   | 5,100   | —          | 6,000   |
| X.....                               | 3,800   | 2,300   | 8,500      | —       |
| XI.....                              | 5,000   | 4,100   | 1,700      | —       |
| XII.....                             | 3,000   | 2,700   | —          | —       |
| TOTAL INCREASE.....                  | 118,450 | 73,950  | 117,350    | -1,300  |
| TOTAL ACREAGE IN 1972.....           | 41,000  | 42,000  | 114,000    | 680,000 |
| TOTAL ACREAGE IN 1977 (TARGETS)..... | 159,450 | 115,950 | 231,350    | 678,700 |

## The Self-Supply Program

For each of the cereals included in the five-year self-supply program launched in 1973, the Department of Agriculture set regional targets, as shown in Table 2.

If these targets are reached, grain acreages in 1977 will be almost triple those of 1972 in the case of wheat and barley and double in the case of grain corn. Oat acreages, on the other hand, would remain practically stationary.

It should be mentioned that the increases in acreage aimed at for 1977 were well on the way to realization in 1975. During the two-year period 1973-74 wheat acreage rose by 20,000 acres, barley by 11,000, and grain corn by 50,000.

Grain production is nonetheless still greatly deficient. We will now consider the constraints on its expansion.

## Constraints on Feed Grain Expansion

The constraints on feed grain supply in Quebec were the subject of the annual meeting of the Quebec City section of the Order of Agrologists in February 1974. The problem was considered from the following standpoints: geographic, agronomic, economic, and political. The conclusions reached at that meeting are worth recalling.

## Geographic Constraints

Geographical constraints are those imposed by climate and soil. Quebec's climate is not a hindrance to the growing of barley and oats although if drainage is poor, it does set limits to the growing of the presently known varieties of fall wheat. Spring wheat is well suited to the climate of several Quebec regions. The number of degree-days needed to successfully grow grain corn restricts this crop to the most favoured zones and it cannot be spread throughout the province.



Although, generally speaking, our soils are not a serious constraint on grain growing, this does not mean that we do not need to attempt a better regional distribution — grain corn and wheat primarily on the soils of the Montreal plain, oats and barley elsewhere. If there is competition between different grains for the same land, the choice will depend on economic conditions.

In practice, urban expansion and the abandonment of farm lands impose greater constraints on the expansion of grain growing than does the nature of our soils.

#### **Agronomic constraints**

The present agronomic constraints on feed grain supply arise from the poor yields resulting from Quebec farmers' many shortcomings in the main aspects of grain growing — drainage, fertilization, choice of varieties and seeds, growing methods, harvesting, and storage.

The figures for average yields of course conceal the excellent results obtained by the many Quebec farmers whose yields of grain per acre are far above the average. These high yields are achieved through up-to-date methods including, in particular, good drainage, early seeding, choice of suitable kinds and varieties, balanced fertilization, weed control and, last but not least, careful attention to harvesting by proper methods at the right stage of maturity.

All things considered, grain grows well in Quebec and gives excellent yields. The present agronomic constraints are easily surmountable; it is a question of wanting and doing.

#### **Economic Constraints**

The economic constraints arise from the cost of grain bought outside the farm, the use the farmer makes of his home-grown grains, and the choices he has to make because of the competing requirements of his different crops and livestock productions.

It pays a farmer to grow grain if he has the necessary land to do so but is at present buying his feed grains at a stiff price; it may be less profitable or even unprofitable if he has to grow feed grains to the detriment of other crops such as hay and pasture. The degree of profitability also depends on the value of the livestock production obtained from the grain. The right choice will be a matter of good management.

In the present price situation, the farmer's thinking differs from what it was when feed grains were cheap. The bushel of grain which he now grows for himself is worth three times as much as not long ago. Unquestionably, the financial costs of producing that bushel of grain have also increased, but not necessarily as fast.

Self-supply has a number of economic advantages including comparative independence from western grain growers, increased income in proportion to the amount of feed grown on the farm, and a chance to plan for increased quantities of farm products (e.g. milk and meat) on the basis of the intensified grain production. In the light of the present situation, there is no justification for disregarding these possibilities.

#### **Political Constraints**

In order to circumvent the often discriminatory price policies of the Canadian Wheat Board, the Quebec Department of Agriculture in 1972 launched a self-supply program in the field of crop production which was designed to reduce Quebec's dependence for feed grain supplies on outside sources, particularly the West. To accomplish this, the Department set itself the following objectives:

1. Increase the yields of grasslands and so free land for other crops;
2. Intensify the growing of silage crops (chiefly corn) and high-yielding grains on the land thus made available;
3. Promote the growing of high-yielding crop plants well suited to the locality.

To make it easier to achieve these aims and to put its self-supply plans on a more solid footing in Quebec's 12 agricultural regions, the Department prepared a local grain selling plan, got the Act respecting farm income stabiliza-



tion insurance and the Act to constitute the "Société québécoise d'initiatives agro-alimentaires" adopted, had the Farm Credit Act amended, and drafted legislation concerning the rational use of farmlands.

The overall effect of these acts and programs will be to reduce the political constraints on self-supply of feed grains in Quebec and encourage the development of the dynamic grains sector which the province needs.

#### **Characteristics of the Different Small Grains**

Each kind of cereal grain has its needs and qualities which must be considered with regard to choices regarding growing conditions and how the crop is to be used. Moreover, within each kind of grain, there are a number of varieties which also differ from one another in type, maturity, adaption, resistance, etc.

The Quebec Plant Productions Council describes the characteristics of the principal grains grown in Quebec in its Guides. The gist of this information is summarized below. The reader may refer to the original text for further details.

#### **Oats**

Oats are well suited to Quebec's climate. They are more tolerant of poorly drained and acid soils than wheat and barley. However, to produce high yields, they need good drainage and good soil fertility conditions.

The energy value of oats is generally less than that of the other grains.

Growing oats can only be profitably if yields of at least 80 bushels to the acre are produced.

#### **Barley**

Barley grows well and gives good results in all of Quebec's climatic regions. It adapts well to cool, temperate climates. In fertile soils, barley can yield over 4,000 pounds of grain to the acre.

To get good results, it is necessary to use varieties suited to our conditions, sow them early and ensure good drainage because barley is very sensitive to poor drainage. The proper amounts of lime and fertilizer must be applied.

#### **Spring Wheat**

The excellent feed value of wheat and the advent of more productive varieties have aroused interest in this grain. Wheat growing promises to be a profitable proposition in fertile, well-drained, neutral or alkaline soils. Wheat resists lodging well. It is therefore possible to give it more fertilizer than would be used for barley or oats, and thus obtain a higher yield. Wheat needs a growing season of 100 to 110 days (1900 to 2100 degree-days).

The energy value of wheat is higher than that of barley or oats and equal to that of corn. A hundredweight of spring wheat has the same feeding value as 109 pounds of barley or 130 pounds of oats.

Fall wheat is an uncertain crop in parts of Quebec which are subject to winter thaws, particularly in the Richelieu and Southwest of Montreal regions (Nos. 6 and 7).

#### **Mixed Grains**

Oats, barley, and wheat can be grown together provided that varieties which ripen at the same time are chosen. Barley or wheat grown in a mixture with oats increases the nutritional value of the crop and helps to reduce the risk of lodging.

The recommended mixtures are as follows: **Selkirk** or **Glenlea** wheat with **Garry**, **Yamaska** or **Stormont** oats.

#### **Rye**

Rye does better in deep fertile soil. In poor, light, droughty soils it yields much less than any other cereal.

The rye grown in Quebec is used for green manuring and as cattle feed. As a green manuring crop, it gives more dry matter than the other grains. It is especially useful for improving light soils. It can be used to advantage for pasture and can be grazed late in the fall and early in the spring, thus prolonging the grazing season.

For feeding purposes, it is necessary to serve it in a 1:1 mixture with another grain.



## Mrs. J. W. Westover

It is with deep sorrow that we announce the death of our President, Mrs. Edyth Westover. She was a truly remarkable woman and will long be remembered with affection by members of the Quebec Women's Institutes.

Mrs. John Walter Westover, nee Edyth Rae Hodgson, died on Sunday, November 9, 1975, in her 78th year. The funeral service was held in Sutton, Quebec, on Wednesday, November 12th. Mrs. Westover was a member of the Sutton Women's Institutes in Brome County.

Mrs. Westover was born in Cheshire, England. She was a graduate nurse of Guy's Hospital, London, and served as a nursing sister in World War I. As a warbride Mrs. Westover came to Canada and settled with her husband on a farm in Abercorn. She joined Abercorn Women's Institute in March 1932 and was a member of that branch until 1951 when she joined the Sutton branch.



Edyth Westover served in many branch and county offices. She was President of Brome County from 1951 to 1955 and from 1963 to 1965. The County presented her with a Life Membership for long and faithful service in 1965. As Provincial Convener of Citizenship and International Relations during EXPO, Mrs. Westover arranged accommodations for thousands of Women's Institute

members and their families from Canada, the United States, and abroad.

Mrs. Westover was elected to the Executive of the Quebec Women's Institutes in 1968 and became President in May 1973. She served as Senior Representative to the Federated Women's Institutes of Canada and was Quebec Representative to the Associated Country Women of the World.

Mrs. Westover was also Past President and Life Member of the Canadian Legion Auxiliary, Branch 158, Sutton. Her husband, who predeceased her, served in both world wars, and her son and one of her daughters served in World War II. She was a member of the Anglican Church women's group in Sutton, a Charter Member of the Sutton Curling Club, and a member of the Board of Directors of the Sutton Library.

Members of the Quebec Women's Institutes wish to express their deepest sympathy to her son John, her daughters Joyce and Carolyn, and their families.

## Thank You

The family of the late Mrs. Edyth Westover wish to express their sincere thanks for all the flowers, cards, and telephone calls which they received from members of the Quebec Women's Institutes across the province. They would also like to express their thanks to those ladies who made the journey to attend the funeral.

Due to the postal strike we are inserting this notice in the hope that it will be accepted with our sincere appreciation.

John and Pat Westover  
Joyce and Harold Heath  
Carolyn and John Livingston

## Last Message

Mrs. Westover's last letter to her fellow members and friends was the President's Annual Christmas message. In that message she hoped that you "would make a little time for meditation" . . . that you would remember "that Christmas, stripped of all its Holy Glory, is nothing but a tinselled



Mrs. S. Triggs, a member of Hemmingford WI, demonstrates flecher at the semi-annual board meeting.



pantomime." Mrs. Westover hoped that you would all have a wonderful Christmas and that 1976 would bring you everything you wished for. Her wish for you last year was that Peace would come to the world; it was still her wish.

### Semi-Annual Board Meeting

The Semi-Annual Board Meeting was held at the Sheraton Mount Royal Hotel at the end of November. Most of the County Presidents were able to attend, in spite of the weather. A full report will be going to the branches later, but here are a few of the highlights.

Anyone wishing to contribute in memoriam to Mrs. Westover may do so by sending a donation to the Grace Church Memorial Fund at Sutton.

Mrs. Lucy French, President of the West Island branch, had represented QWI at a recent CanSave banquet. She reported that 781 knitted articles, 50 pounds yard good pieces, 725 Handi-bags, \$1,400 worth of Dominion Store cash tapes and \$273 in cash had been donated to the organization this past year. Other groups support CanSave but the WI is one of the chief supporters and, mainly due to them, Quebec turned in more than any other province. They are very grateful for all the work we do for them. CanSave is a voluntary organization, and only nine per cent of the money received is used for administrative purposes.

We were pleased to offer our Secretary, Mrs. A.C. Champion (nee Burgess), our best wishes on her recent marriage. The Board presented her with a pottery jug as a small token — a happy choice, as she collects them.

The Adelaide Hoodless Homestead has to be decorated and the organ repaired. Mrs. McLean asks that we make 1976 Homestead year. If each Branch can contribute \$1 towards the Hoodless Homestead Fund, this would greatly help. This is a voluntary contribution only.

The QWI awards at Macdonald College had been presented by Miss Smith in early November. The Frederica Macfarlane Scholarship was presented to Miss Ellen O'Connor. The Mrs. Alfred Watt Memorial Scholarship went to Lison Chauvin and David Kirkland had been presented with the QWI Bursary. Our congratulations to these successful candidates.

A very interesting demonstration was given on the Friday afternoon by Mrs. Stanley Triggs, a member from Hemmingford, on an old Canadian craft — flecher. This is a form of hand weaving and is used for belts, cummerbunds, wall hangings, and purses, etc. Mrs. Triggs obviously loves her craft and was well able to convey her enthusiasm and interest to her audience.

WI stickers — 2½" x 3¼" — oval and with the picture of our QWI badge on them in blue and gold are to be printed. Members

will be able to buy them for their windows, cars, etc. The cost is estimated at 23 cents each plus tax.

The Nominating Committee for '76: Chairman, Pontiac County, President, Mrs. H.R. Rabb, Box 490, Fort Coulonge, J0X 1V0, Montcalm and Mississquoi.

Resolution Committee: Megantic, Magdalen Islands and Gatineau, Megantic-Chairman, Mrs. Margaret Demsey, Inverness.

### Sherbrooke County School Fair

I was pleased to be on hand last September 6 at the Lennoxville Elementary School to see all the hustle and bustle of pupils arriving with their boxes of fruit, vegetables, scrap books, collections, cooking, sewing, and woodwork for the annual County School Fair.

After all the exhibits were arranged, the judges began their task. Flower exhibits were excellent since there had been no frost. In the fruit and vegetable departments both quality and quantity were better than last year. However, as was the case last year, a few had to be disqualified because display directions had not been carefully followed. Sewing entries were excellent — the one dressed doll was exquisite. Cooking and candy exhibits were very attractive, and the judges must have had a difficult time judging them.



The Public Speaking contest was held after lunch. There were only six entries, which was disappointing, but the contestants did well and showed excellent training. Let's hope next year will see many more entering this important contest.

Sports events were carried on under difficulties because of rain but enthusiasm wasn't dampened!

#### WI Canteen

The 21st. Provincial Ploughing Match was held at the Lennoxville Agriculture Research Station in September. Also held was the 96th contest of the Sherbrooke Ploughing Association. The **Sherbrooke County Women's Institutes** ran a Canteen for the three days that the events were held. It was a big project but the ladies came through with flying colours!

A 25-pound turkey was cooked and ground up for sandwich filling at one home. At the same home, other fillings were prepared and sandwiches were made on each of the evenings. Members from each branch came to work. Lunches were packed for the men in the field. At the Canteen, baked beans, sandwiches, and doughnuts were sold to visitors.

A member's husband was on hand with his car to nip out for odd extras that were needed and deserves a special thank you. The conveners are to be congratulated on a well-run Canteen and everyone was happy with the profits made.

Mrs. M. C. Sewell  
County Publicity Convener.

#### Annual Bus Trip

After much anticipation and many plans the time had come one day last Spring for the annual bus trip planned by **Clarendon Women's Institute** (Pontiac County). The chartered bus left Shawville with 48 Institute members and guests on board.

A couple of hours on the road made us feel the need for morning coffee and our first stop was at Actinilite. Once more we proceeded southwest, driving past the Lift Locks at Peterborough and stopping at the Flying Dutchman Restaurant at Bowmanville for lunch.

Having a much-travelled bus driver added greatly to our trip, and he showed us many historic sights and places of interest. We had a short stop at old Fort George. After the usual sightseeing and picture-taking, we proceeded on towards Niagara Falls. We enjoyed the falls very much, bought souvenirs, had a light lunch and embarked once more — this time towards Toronto. Arrangements had been made for us to stay at the Westbury Hotel. Many of the group had dinner at the hotel, but a trip to Toronto wouldn't be complete without an evening out dining on Chinese food. Sixteen of us went to the Lichee Gardens.

The next morning we were taken on a sightseeing tour of Toronto, ending at the Four Seasons where we were guests on the Elwood Glover show. Many of the group had been looking forward to this occasion for some time. Lunch was served while we enjoyed the show.

We enjoyed two hours of shopping at Yorkville Shopping Centre, one of the largest shopping centres in Canada. We also enjoyed our evening meal near Belleville. Then homeward bound, we arrived back in Shawville at 9:30 p.m., a tired, but happy group.

The last statement heard was, "When do we go again?"

#### Art and Craft Display and Penny Sale

A special program was arranged for the September meeting of the **Stanbridge East** (Missisquoi County) WI. Members of each of the Missisquoi County branches were invited to participate in an Art and Craft display. The general public were also invited to attend.

At 3 p.m., after the business meeting, guests began to arrive. The hall, which had been most attractively decorated with flowers of many varieties and colours, made a splendid background for the long tables which were covered with handicrafts of every variety and a really splendid showing of paintings.

There was a fine display of quilts in many patterns, many being prized heirlooms. Rugs, cushions, needlepoint, knitting, crocheting, weaving, and embroidery of all kinds were on display. There was also a collection of small antiques, which included jewellery, woodwork, dishes, and silverware.

A long table was arranged with articles for the Penny Sale. This provided the guests with an hour of fun while they were enjoying their lunch at the small tables scattered about the room; \$30.15



Stanstead County WI celebrated their 60th Anniversary in October. Front: Mrs. D. Johnston, Miss N. Holmes, the late Mrs. E. Westover, Mrs. G. Parker. Standing: Mrs. W. Coates, Mrs. H. J. Stubbs, Mrs. D. Cascadden, Mrs. G. LeBaron, Miss E. Smith, Mrs. F. Taylor and Mrs. R. Knight.



was raised at the Penny Sale for CanSave.

All branches in the County were represented and many of the members displayed handicrafts. Guests came from surrounding towns of Bedford, Farnham, Cowansville, Dunham, etc.

The County President, Mrs. Irene Williams, congratulated the Stanbridge East branch for the fine exhibition and urged all members to enter the WI competitions in handicrafts for the coming year, also the plays.

The branch President, Mrs. Short, thanked the guests for coming and expressed the hope that they would all get together again in the near future for another time of fellowship.

#### **Chateauguay-Huntingdon Roundup**

**Aubrey-Riverfield** WI visited Walshaven in Ormstown instead of having their usual picnic last summer.

Walshaven is a low-cost housing project for seniors. In the basement there is a library, hair dressing salon, small kitchen, and common room or recreational hall where many of the seniors meet in the afternoon to learn handicrafts with a bilingual group of ladies, or make things with the tools in the workshop presided over by the janitor, himself a senior citizen. The first and second floors have 32 thoughtfully planned apartments with either one or two bedrooms. Rates are charged according to one's income and type of unit.

WI members were welcomed by Mrs. Mason, chairman of Walshaven Committee and given a tour of the building. They then met in the common room with the residents. A WI member, dressed in Hawaiian costume, showed slides and gave a commentary of a trip to Hawaii. She also displayed several interesting handicraft items she had brought home with her.

Aubrey-Riverfield ladies served tea and cookies, which was appreciated by the residents.

"Walshaven is a terrific place for over 65's". That seems the consensus of the majority living there. As one of the WI projects is care for the seniors, it seemed fitting that the branch would meet there, visit with them and keep them in touch with the community.

It would seem that much of the impetus behind other communities' push toward similar housing projects for the elderly is due to the tangible success of Walshaven. If the trend continues, it will help to make amends for some of the neglect to which older people on fixed incomes have been subjected to for many years.

At a recent meeting the motto "The best way to explain it is to do it" was carried out with the display of a hand-made quilt, with top, filling and lining all completed

in one step. Wool had been distributed earlier to knitters and some nice articles were handed in for CanSave.

Several of the **Ormstown** WI members live in the Walshaven Apartments and they have been busy with a rummage sale. A basket of groceries and a hand-knitted sweater had been donated for a drawing at the sale. Members added to their funds with a mini-bazaar and food sale at their October meeting. At one meeting the ladies heard a talk on life at George River and saw a display of Eskimo artifacts. In November the teachers from the Elementary School were entertained — this being Education evening.

An interesting contest was held recently in the **Dundee** WI. This was one on "the community from its earliest days till now." Pictures of different parts of the community were also on display and members had to name them. A donation was made to the County funds and a card party was held to add to the branch treasury.

**Dewittville** WI entertained two other branches and the County president. A guest speaker, Mr. Earl Moore, spoke on his Canadiana Village at Rawdon and showed a film about it. The branch later enjoyed a visit to the Village.



This WI sponsors a skating rink for the use of the community and is doing so again this winter.

Three student bursaries were awarded this year and in November the members had a potluck supper at the Walshaven apartments in Ormstown.

At a recent meeting one of their members, who is a chiropodist, spoke on the care of feet and answered many questions.

One of the fall highlights of the Chateauguay Valley area is the Havelock Fair. This Fair has been in existence for over 100 years and many groups, including the Women's Institute at **Franklin Centre** have booths there. This year was a successful one for the Franklin WI booth, where all kinds of hand-made articles and home-baking were sold. This is their main fund-raising project of the year. A spelling 'B' at one meeting, provided some interesting fun.

International Women's Year was observed in **Hemmingford** in November with a film program. One film dealt with mothers who wanted to work or were working and the problems of adequate day care centres. Most were too costly for the average working mother. The needs of women and their fight for equality and equal opportunities was the subject of another. These films were obtained from the National Film Board Office in Montreal and were free of charge except for transportation costs. Members answered the roll call by naming a prominent or distinguished woman.

International Women's Year also

was observed by the **Howick** WI with a question and answer period on the rights of women and a panel discussion was held on IWY.

A member gave a talk on soapstone carving and had a display of articles she had made. 4H is close to their hearts and the members support their local group.

Handi-bags for CanSave were made by several branches in the County. One gave a donation to help defray shipping costs and another gave material pieces from their local textile mill.

**Huntingdon** enjoyed a trip through eastern Canada via a talk and pictures by Mrs. Charles Reid. Guessing the mileage of the trip made an interesting contest, with three ladies coming close to the 3,000 miles travelled. A donation was given to their County fund and they increased their own by paying one cent per inch for their waistline measurements.

### **A Very Special Birthday**

An afternoon tea was held on September 27 at the Wales Home to honour Mrs. Etta Healy, a well-known and much respected resident of Richmond, who was celebrating her 100th birthday.

About 80 guests were present at the event. Mrs. Healy received telegrams from the Queen, Prime Minister Trudeau, Mr. Réal Caouette, and Mr. J. H. Faulkner. A guest book was a gift from the **Cleveland** WI of which she has been a member for so many years. During this past year she was presented with an Abbie Pritchard Memorial Fund mohair throw.

Mrs. Healy has been a member of WI for many years. On October 18, 1919, she invited several ladies to meet in her home and, with the help of the local agronomer, formed a Homemakers Club. This name was later changed to Women's Institute. When Cleveland WI celebrated its 40th Anniversary, Mrs. Healy was presented with a Life membership.

Although she is now a member of the Wales Home, she still maintains her interest in Women's Institute work. Best wishes are extended to her from her many friends.

### **Correction**

A byline was missing from the Federated Women's Institutes of Canada Annual Board Meeting report in the October Journal. This report was by Miss Edna Smith, (then) 1st Vice President, Quebec Women's Institutes.

### **Home Nursing Course**

The **Hemmingford** branch of the Chateauguay-Huntingdon County WI sponsored a Home-Care Course in the spring. The free course is one prepared by the Canadian Red Cross. The only expense was the pupil's manual that cost \$2. An R.N. was required to teach the course and she could have other assistants. In our case we had three teachers — one was a recent graduate and the other two were graduates who had been inactive for some years. It was quite a challenge for them but was most interesting and served as a good refresher course.



One of the teachers, Mrs. J. Robertson, demonstrates how to diaper a baby at the Hemmingford WI home nursing course.



The course covered care of the sick in the home; how to convert a room into a sickroom; how to adapt what was in the house to save buying expensive equipment; how to organize the care of a sick member without disrupting the whole family; how to give bed baths and bed care; how to change bedding with a patient in it; how to bath a baby; First Aid and emergency treatment. Linen and utensils required for the course were loaned by the Red Cross. Pamphlets and charts of all kinds were also available.

A Home Economics graduate gave a talk on nutrition and how to prepare and serve nourishing meals. She stressed small helpings attractively served on a pretty tray would add eye appeal.

Our local doctor spoke briefly on heart attacks, strokes, what to do in an emergency, diabetes, and immunization. He answered many questions.

Our recent graduate borrowed an inflatable model from the hospital where she works and demonstrated artificial respiration on it — including mouth to mouth resuscitation. The class then tried it for themselves and could see and feel when their "patient" was getting air in the right place.

A doll was borrowed and used to demonstrate bathing and dressing a baby.

Pupils learned how to make a bed rest from a grocery box, how to use a box as a bed table, how to keep blankets from pressing on a limb, and how a blanket and a few pins could be made into a dressing gown. A 50-cent booklet

from the Red Cross gave many more examples of how things around the house could be adapted to a patient's use. The same booklet also showed how handicapped persons could be made more independent, i.e., padding the handles of knives, forks, and spoons to make it easier for persons with arthritis to hold them.

The ladies learned a great deal from the course and from questions that came up at each session. At the end of the course Mrs. Jacqueline Borelly from the Red Cross in Montreal presented the pupils, who qualified, with their cards.

The Red Cross would like to see more of these courses given in the communities. Patients are not kept in hospitals very long now and with intelligent care they can be looked after at home. Short or long-term illnesses in the family can also be undertaken with less apprehension.

Should disaster strike a community (earthquake, tornado, flood) it is good to have a trained group ready in the community that knows what to do.

### Highlighting Youth

Halloween is a fun time for children and the WIs in **Megantic County** do their part to help make this occasion a happy one for the community children by planning a Halloween party. This is an annual

project. The children do their part, too, and collect for UNICEF.

**Inverness** has received wool from the Canadian Save the Children Fund and will knit it into mitts and socks. The wool is free and can be obtained by writing to CanSave for it. Finished articles are returned to the society.

The branch added to their funds with an auction of homemade foods. A card party is to be held soon.

A donation was given to the County Historical Society to help renovate the cemetery in Maple Grove where one of the earliest pioneers is buried. Paint was given to the Oddfellows to paint their hall.

A Roll Call: "name a Canadian who made front page news in '75 and tell why" brought many interesting names, prominent among them being those of Robert Bourassa and George Springate.

**Kinnear's Mills** held a very successful Children's Fair this fall with 33 children participating. Gardens were judged prior to the Fair. Judges were recruited locally from retired teachers and farmers' wives. One local French lady, an avid gardener, was a judge in the flower and vegetable sections. A lunch was served to the judges at 5 p.m. and in the evening there was an excellent turn out of parents and friends who came to see the exhibits. A trophy is to be presented to the child with most points.



This branch, who welcomed a new member, is busy with plans to cater for a wedding anniversary and a banquet. A wreath was bought to honour a departed member and the ladies served a lunch to the funeral party after the service.

Shut-ins and the sick in the County have been remembered with cards and sunshine baskets.

#### Missed Only Two Conventions

**Mrs. Muriel Bronson** joined the Guyon branch (Pontiac County) of the Women's Institute in 1946 when this branch was organized. Her membership has been continuous from that time. At the branch level she has been President twice, Secretary several times, Vice-President and Treasurer at the present time. She also has held most of the Convenerships.

At the County level Mrs. Bronson had a three-year term as County President and has held Convenerships at this level. She has missed only two Provincial Conventions at Macdonald College. Muriel Bronson has been an active participant in all worthwhile causes, some of which are: needlework at Fall Fairs, weaving, leather, oil painting, improvement in appearance of War Memorial, help to needy families at home and overseas. She was a member of a Ground Observer crew during World War II.

Mrs. Bronson has been presented with a 25-year pin from her own branch and with a Life Membership pin at County Level. Because of her loyalty to this group and her

steadfastness she, at one time, recruited enough new members to keep her branch from disbanding.



---

Thank God for dirty dishes —  
They have a tale to tell;  
While other folks are hungry  
We've been eating very well.  
With home, health and happiness  
I shouldn't want to fuss  
For by this stack of evidence  
God's been very good to us.

---

#### Dear WI Members

I hope you had a happy holiday season and that '76 will be good to you. Our holidays were extra special as we had our grandchildren — 2½ and one year — with us and after many years of only adults, it was a nice change.

Our sympathy to the family of Mrs. T. Zimmer of Brownsburg who died recently. At the time of her

death Mrs. Zimmer was President of Argenteuil County, and she had, at one time, served as Provincial Convener of Agriculture. She will be sorely missed.

Winter activities have started and some of you are taking courses — from French conversation to Yoga — stretching your mind as well as your bodies!

Mr. Guy Renaud spoke at **Bury** on his Camp des Lutins (Leprechauns) — a camp where children come for two-day intervals of outdoor education. The Camp helps them to appreciate nature and they ski, snowshoe, and hike in the woods.

Card parties are in full swing. They are fun and a good way to raise money. Some raise funds catering for banquets, selling quilts, oyster parties, and white elephant and food sales.

Interesting evenings with speakers and slides have been held. **Canterbury** had a speaker, Mrs. Irwin Watson, who spoke on new methods of nursing. They saw films of Cozumel Island which is off the coast of Yucatan. **Ascott** heard Mrs. McVety speak on her trip to Switzerland, Germany, and Austria. **Lachute** WI heard some interesting history on Lachute from 1919-1925. The members of **Jerusalem-Bethany** went to the Far East and Hawaii and parts of the Mediterranean with Mrs. K. Morrison, via slides and a most interesting commentary.

A late (because of illness) report from **Shefford County** showed that members have been busy: handbags were made, donations given



to Education/Nutrition Fund, Pennies for Friendship and to the Young Farmers Association.

A convener reported on the use of jam and other jars for preserving. Jam jars could be used but coffee jars were not recommended as they won't stand the heat required in processing. A handy hint for these days — Save bags and take them back to the supermarket.

A Roll Call, "Name one thing pertaining to health for which you are most thankful" brought answers such as Medicare; new surgical techniques; the ability to work, etc.

**Granby West** had a gift shower for a member after her home had been destroyed by fire. Members here visit a Senior Citizens' home each month and take treats to the patients. They enjoyed two contests: one on Canadian emblems and flowers, and the other on brand names.

"Guess the weight of a cake" with the cake as the prize was a

fun contest for **Waterloo-Warden** members, and they enjoyed a homemade cookie exchange. One member of this branch celebrated her 95th birthday and was remembered by the ladies. A "surprise packet" drawing brought a nice sum which was donated to "Care". The branch enjoyed a summer visit to Madame Benoit's farm at Sutton.

The annual **Gaspé County** WI Fall Fair was held at Dartmouth River this year. All seven branches took an active part — 93 members entering 1,246 exhibits. One member, Mrs. Edsel Langlois exhibited in 44 of the 50 classes. **Dartmouth River** won the cup for the most entries per branch. A lovely meal by the hostess branch ended a busy day. An item of interest to farmers — The son of a member from **Barachois** had a pig who gave birth to 14 piglets and all, but one, were raised successfully.

International Women's Year is near its end. I don't think many projects have been started, but most branches have devoted a meeting or part of a meeting to it. **Pioneer** answered the Roll Call

"Name a distinguished living Canadian woman" with Claire Kirkland-Casgrain, Jeanne Sauvé, Judy Lamarsh, among many. This WI has given a donation to "Care" for a project to bring clean drinking water to remote villages in Africa, Latin America, and elsewhere. Cards had been ordered from UNICEF and **Frontier** is knitting for CanSave and planning their annual casserole supper for husbands and friends. They welcomed a new member. **Matagami** ladies enjoyed a demonstration of flower arranging — selling the flowers afterwards by auction. A Penny Sale also added to funds. A donation was made to the English School Library and to Pennies for Friendship. They heard a talk on Education and enjoyed an interesting film on Australia. Copies of the booklet "Women and the Law in Quebec" have been distributed to the members. WI was publicized in several ways: Roll Call of news items from WI at home or overseas; booklets, pamphlets, histories of WIs, etc., in a display; what WI has done in your community; excerpts read from Federated News on the Perth Conference and words from "Federated News" and "Macdonald Journal" contests.

Some miscellaneous items of interests: you can store onions in clean nylon stockings. Add cherry KoolAid to a batch of apple jelly for a delicious cherry jam. A "Name the Calf" contest was held again this year by the **Dalesville-Louisa** WI — "Lady Sue" the winner by Mrs. Gordon.

Mrs. J. Robertson  
QWI Publicity.

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